

12
Med
C

Clinical medicine & surgery

THE AMERICAN JOURNAL OF

CLINICAL MEDICINE

Vol. 29, No. 9

SEPTEMBER, 1922

R
11
C55
V.29
No.9

314817 D
18 . 4 . 35

THE "verdict of your peers" may err:
Men's eyes may fail to see
The motives which inspire you,
The things you strive to be.

PRESS on regardless: prove your worth
By winning to the goal,
Content if every step you take
Is Sanctioned by Your Soul.

G. H. C.

Clinical medicine & surgery
THE AMERICAN JOURNAL OF
**CLINICAL
MEDICINE**

Vol. 29, No. 9

SEPTEMBER, 1922

R
11
C55
V.29
No.9

314817 D
18 · 4 · 35

THE "verdict of your peers" may err:
Men's eyes may fail to see
The motives which inspire you,
The things you strive to be.

PRESS on regardless: prove your worth
By winning to the goal,
Content if every step you take
Is Sanctioned by Your Soul.

G. H. C.

PHYLLOSAN

A New Chlorophyll Product

**FOR CHLOROSIS, ANEMIA
AND WASTING DISEASES**

Liberal Sample
for Clinical Test
Upon Application

MERCK & CO., 45 Park Place, New York

In summer diarrhea, intestinal catarrhs, etc.

Tannalbin

DOSE: *Infants:* 2 to 6 grains several times a day in gruel. *Children:* 7½ to 15 grains,
Adults: Half a teaspoonful (15 to 30 grains in powder or 5-grain tablets)
three to five times a day at hourly intervals.

For Sale by
MERCK & CO.
New York St. Louis

Literature and Samples from
E. BILHUBER, Inc.
25 West Broadway, New York

IN JANUARY, 1917

The Bacillus Acidophilus

was introduced and made available to the medical profession for the first time through

BACID PREPARATIONS

which were created solely to make possible the therapeutic use of this antiputrefactive organism the Normal Habitat of which is the Human intestine in health.

BACID PREPARATIONS

Tablets—Capsules—Liquid Cultures

do not now and never have contained the *B. bulgaricus*—
either Type A or Type B

LITERATURE, BIBLIOGRAPHY ON REQUEST

Guaranteed and Manufactured ONLY by

THE ARLINGTON CHEMICAL COMPANY
YONKERS, N. Y.

WILLIAM SCHEPPEGRELL, A. M., M. D.

President American Hayfever Prevention Association. Chief of Hayfever Clinic, Charity Hospital, New Orleans

Says:—

IF the patient applies for treatment during an attack of hayfever, the pollen extracts are usually ineffective, and a vaccine should be used, these being injected at intervals of one or two days until the severity of the attack subsides.”*

The Vaccine used by Dr. Scheppegrell is practically identical with Sherman's No. 36 which is being extensively used in the prophylaxis and treatment of Hayfever.

*From Dr. William Scheppegrell's new book on Hayfever and Asthma
Lea & Febiger, Publishers

Bacteriological Laboratories of

G. H. SHERMAN, M. D.

DETROIT, MICH.

The combination of tonics and stimulants explains the clinical results obtained in the treatment of nervous disorders by the use of

FELLOWS' COMPOUND SYRUP OF HYPOPHOSPHITES

“A true stabilizer of shaken nerves”

It contains the “mineral foods”, Sodium, Potassium, Calcium, Manganese, Iron and Phosphorous, and the stimulating agents, Quinine and Strychnine

Samples and Literature sent upon request.

FELLOWS MEDICAL MANUFACTURING CO., Inc.

26 Christopher Street, New York, N. Y.

The American Journal of Clinical Medicine

A MONTHLY JOURNAL

DEVOTED TO ACCURACY, DEPENDABILITY AND HONESTY IN EVERY DEPARTMENT OF MEDICINE AND TO THE SAFEGUARDING OF THE DOCTOR

GENERAL EDITORIAL STAFF:

EDITOR-IN-CHIEF: A. S. BURDICK. MANAGING EDITOR: H. J. ACHARD.
CONTRIBUTING EDITORS: WILLIAM RITTENHOUSE, GUSTAVUS M. BLECH, J. F. BIEHN,
FRANK B. KIRBY

PUBLISHED BY THE AMERICAN JOURNAL OF CLINICAL MEDICINE, Inc.

ENTERED AS SECOND-CLASS MATTER MARCH 31, 1906, AT THE POST OFFICE AT CHICAGO, ILL.
UNDER ACT OF MARCH 3, 1879.

Subscription Rates.—To any part of the United States, Canada and Mexico, \$3.00 per year, postage free; single copies thirty cents; to all other countries an additional charge of \$1.00 is made for postage. N. B.—Make all checks and remittances for subscriptions and renewals payable to THE AMERICAN JOURNAL OF CLINICAL MEDICINE, adding 10 cents for exchange. Two years for five dollars.

Address Changes.—Notify us promptly of any change of address, mentioning both old and new addresses. We cannot hold ourselves responsible for copies of CLINICAL MEDICINE sent to former addresses, unless we are notified as above. If you fail to receive your copies of CLINICAL MEDICINE notify us at once, and we will supply you if we can. Complaints covering more than three months usually cannot be honored.

Discontinuance and Renewals.—According to Post-Office regulations, subscriptions must be expressly renewed within one year of the term for which they are paid. When this paragraph is marked and the Journal comes to you in an "unusual wrapper," it means that your subscription expires with that issue and is a request for you to send in your renewal at once. Renewal blank is enclosed for this purpose. Kindly always renew promptly.

Warning.—Pay no money to an agent unless he presents a letter showing authority for making collection.

Address.—THE AMERICAN JOURNAL OF CLINICAL MEDICINE, 4737 Ravenswood Ave., Chicago, Ill.

The Indian Alkoloidal Company, sole agents for India, Burma and Ceylon.

Vol. 29, No. 9

September, 1922

EDITORIAL DEPARTMENT

"American Chemistry Menaced".....	633	As To Irregular Practitioners.....	636
Do We "Enjoy Poor Health"?.....	634	"Clinical Medicine" and Specialists.....	637
The Limitations of Intravenous Medication.....	635	The Narcotic-Drug Evil.....	638

(Continued on Page 4)

Why Do Leading Physicians Prescribe

STYPTYSATE

In Cases of Accidental, Concealed, Petechial, Postpartum
and Vicarious Hemorrhages?

BECAUSE—Styptysate meets all specifications for a reliable non-toxic styptic free from narcotics.

BECAUSE—Styptysate is particularly suited in the treatment of vicarious and other recurring hemorrhages.

BECAUSE—Styptysate produced satisfactory results where ergot and hydrastics had failed.

Send for samples and literature.

ERNST BISCHOFF CO., Inc. 81 West Broadway, New York, N. Y.

Essential Points *in the* Diet of Growth

1. The food must contain those food accessory substances known as vitamins, but the presence of the vitamins is not sufficient in itself.
2. The food must be well balanced, for a deficiency in one element means the ineffective action of the other food elements.
3. The vitamin-containing food even though well balanced must be one that is easily assimilated. It is a physiological crime to clog the system with fats that cannot be digested.

VIROL as it reaches the public contains the vitamins; it is well balanced, and can be assimilated in the most delicate conditions. That is why VIROL is used in more than 2,500 hospitals and infant clinics.

The presence of vitamins in VIROL as sold to the public is established by an independent report by the Bio-Chemical Department of the University of Cambridge, a copy of which will be sent to any member of the medical profession on request.

VIROL

Sole Agents for United States

Geo. C. Cook & Co., Inc., 59 Bank Street, New York

Maternity Center Association.....	639
Typhoid Fever in the Civil Population Since the War	641

Health Insurance Through Dental Prophylaxis..	641
The Cost of Prohibition Enforcement.....	642
Surgical Seminar.....	642

LEADING ARTICLES

The Treatment of Epilepsy, Incipient and Chronic. Tracy	645
A Case of Bichloride of Mercury Poisoning. Abramson	646
Organotherapy and Its Relation to the Specialist. Kern	648
My Twenty Favorite Drugs—V. Rittenhouse.....	651
The Problem of the Opium-Addict. Goetz.....	652
Handling the Health Problem of School Children in San Francisco. Brown.....	657

Successful Free Transplantation of Testicles from Apes to Man. Thorek.....	662
The Successful Treatment of Chronic, Noninfectious Vaginal Discharges with Atropine. Herb	664
Memoirs of the World War. Blech.....	666
SURGICAL SEMINAR	673
THE GENERAL PRACTITIONER.....	677
GOOD MEDICINE	681

LET'S TALK IT OVER

The Eclectics and the Concentrated Principles...	685
The Value of Mental Therapeutics.....	687
Sun and Wind.....	689
Idiosyncrasy to Butyn.....	689
Nervous Reflexes—and Sin.....	690
U. S. Civil-Service Examinations.....	690
Sparteine Sulphate	690

For a National Health Week.....	691
Aftercare of Laparotomy Patients.....	691
Aniline Poisoning.....	693
Specific Symptomatology for the Employment of Hamamelis	694
How to Reduce Eyestrain.....	695
Practicing Medicine in the Wilds of America....	698

WHAT OTHERS ARE DOING

Something about Hiccough.....	701
Butyn: A Substitute for Cocaine.....	701
Garlic as a Hypotensive.....	702
Zoster Following Tuberculosis Pleurisy With Effusion	702

A New Local Anesthetic for Nose and Throat Work	702
Transuterine Insufflation, A Diagnostic Aid in Sterility	705
AMONG THE BOOKS.....	705

LEADING ARTICLES TO APPEAR SOON

X-Ray and Clinical Findings in Normal Chests.....	NATIONAL TUBERCULOSIS ASSOC.
Diabetes in the Negro.....	GOLDSTEIN
Modern Facial Prosthetics.....	JESSER
The Midwife	MORRIS

Operative Surgery

Special course in general surgery, operative technique and gynecologic surgery given to physicians of both sexes. Enrollment limited to THREE.

FIRST ASSISTANTSHIP. NO
CADAVER OR DOG-WORK

For particulars address

DR. MAX THOREK

AMERICAN HOSPITAL OF CHICAGO

Irving Park Boulevard and Broadway

THE VALUE OF OVARIAN SUBSTANCE

as combined in
RORER'S

Ovara Dysfunction Capsules

has been demonstrated by many physicians. Doctor, you will find this formula relieves menstrual insufficiency, anaemic malnutrition, neurones and psychoses at the menopause. The excellent results will surprise and please you.

Give This Product a Trial Now
100 Capsules, \$3.50 Postpaid
LITERATURE ON REQUEST

WM. H. RORER

PHARMACEUTICAL CHEMIST

267 S. 4th St. 259 S. Orianna St.
Philadelphia, Pa.

If you have not received your copy of the last

Breon's Medical Gleanings

a magazine devoted to Intravenous Therapeutics, write to the nearest Breon Branch and a copy will be sent to you at once.

Geo. A. Breon & Company

Manufacturing Chemists

NEW YORK
CHICAGO

KANSAS CITY
ATLANTA

Pioneers in Intravenous Therapy

Index to Advertisers

	Page		Page
Books and Journals		Nestle's Food Co.....	41
Amer. Drug Mfrs. Assn.....	59	Postum Cereal Co.....	19
Counsel Service.....	36	Valecia Evaporated Milk Co.....	25
Hornsby's Hosp. Journal.....	60	Welch Grape Juice Co.....	35
Medical Herald.....	60	Laboratories	
Buggies		Nat'l. Pathological Lab.....	22
Eureka Co.....	67	Laboratory Tests	
Business Opportunities		Standard Med. Research Prod. Co.....	31
Business Opportunities.....	44-46	Mineral Water	
Case and Saddle Bags		French Lick Springs Hotel Co.....	55
Massengill Co., S. E.....	61	Obstetrical Table	
Clinical Instruction		Nesmoht Sales Co.....	44
Plank, Dr. T. Howard.....	63	Orthopedic Apparatus	
Elastic Bandages and Supplies		Ambulatory Pneumatic Splint Mfg. Co....	55
Ambulatory Pneumatic Splint Mfg. Co....	55	Burt, Philo, Mfg. Co.....	51
Empire Mfg. Co.....	12	Pharmaceuticals and Biologics	
Storm, Dr. Katherine L.....	42	Abbott Laboratories, The.....	
Electro Therapeutic Apparatus and Supplies		Alkalol Co.....	45
Fischer & Co., H. G.....	61	Anasarcin Chemical Co.....	34
Graf, Dr. Chas. B.....	42	Antidolar Mfg. Co.....	41
McFaddin & Co., H. G.....	43	Arlington Chemical Co.....	2nd Cover
McIntosh Electrical Corp.....	55	Armour & Co.....	7
Sterling Therapeutic Lamp Co.....	55	Battle & Co.....	50
Ultima Physical Appliance Co.....	13	Bilhuber & Co., E.....	2nd Cover
Victor X-Ray Corp.....	37	Bischoff & Co., Ernst.....	2
Foods		Bovine Co.....	51
Cook, Geo. C. & Co.....	3	Breon & Co., Geo. A.....	5
Fleischmann Co.	15	Bristol-Myers Co.....	67
Horlick's Malted Milk.....	67	Burnham Soluble Iodine Co.....	59
Joint Coffee Trade Pub. Co.....	27	Campho-Phenique Co.....	56
Kellogg's Toasted Corn Flakes Co.....	23	Carnrick Co., Geo. W.....	11
Lister Bros	65	Cavendish Chem. Co.....	26
Mellin's Food.....	24	Century National Chemical Co.....	30
		Chicago Pharmacal Co.....	44
		Columbus Pharmacal Co.....	54
		Cook & Co., Geo. C.....	53
		Daniel, Jno. B.....	49

“Just What a Ligature Should Be”

Armour's Catgut Ligatures, Plain and Chromic, boilable, strong, absolutely sterile, 60-inch, 000 to 4 inclusive.

Iodized Catgut Ligatures, non-boilable, strong, sterile and very supple, 60-inch, 00 to 4 inclusive.

\$30 per gross. Discounts on larger lots.

**Also emergency lengths (20-in.) Plain and Chromic—
\$18 gross**



ARMOUR AND COMPANY

CHICAGO, U. S. A.

ELIXIR OF ENZYMES

—aid to digestion and vehicle for iodids, bromides, etc.

SUPRARENALIN SOLUTION

—astringent and hemostatic.

PITUITARY LIQUID

—ampoules, surgical 1 c. c.
obstetrical $\frac{1}{2}$ c. c.

6 in a box.

LOESER'S INTRAVENOUS SOLUTIONS



CONTROLLED BY
CHEMICAL
PHYSICAL and
BIOLOGIC TESTS

Loeser's Intravenous Solution of IRON and ARSENIC

A sterile, stable solution in hermetically sealed nonsoluble glass ampoules.
Each ampoule contains 64 milligrams (1 grain) of Iron Cacodylate.

Permits the Intravenous Injection of a Hemotonic of Established Therapeutic Value.
The Intravenous Injection overcomes every question of absorption and warrants the expectation of improved clinical results as compared with other methods of administration.

READY—July Journal of Intravenous Therapy. Special Anemia Number.

Abstracts and references from American and foreign Journals

COPY ON REQUEST

New York Intravenous Laboratory
100 West 21st Street
New York, N. Y.

Producing Ethical Intravenous Solutions
for the Medical Profession Exclusively



ACRIFLAVINE



More Than Meets the Official Tests for Purity IN HANDY TABLET FORM

ACRIFLAVINE, Abbott, identifies one of the best drugs procurable from any source in a highly convenient form. With these tablets, **ACRIFLAVINE** solutions are quickly and easily prepared as they are needed, whether for irrigation or injection. They are also suitable for internal use, as a urinary antiseptic.

Now serving effectively in gonorrhea. **ACRIFLAVINE** is reported to terminate an attack of gonorrhea more quickly than any other expedient. It has high germicidal power (many times exceeding that of mercuric bichloride) along with rare penetrability.

A good antiseptic for wound treatment. **ACRIFLAVINE** is said to inhibit phagocytosis less than most other strong germicides. It is active in the presence of serum (exudate).

ACRIFLAVINE is also given by mouth as a urinary antiseptic, laboratory tests upon rabbits having shown that it produces an antiseptic urine without injuring the animal.

Doctor, send for literature on **ACRIFLAVINE**, and if you haven't done so, give this important drug the trial it deserves.

NET PRICE: 100 Tablets, \$2.40

Specify Abbott's, the genuine Council-passed drug, when prescribing. Orders filled direct if your druggist cannot supply it.

Other Abbott Council-passed products are Butyn, Chlorazene, Digipoten, Parresine, Dichloramine-T, Procaine, Barbitol, Cinchophen, Neocinchophen, etc. Send for literature.

THE ABBOTT LABORATORIES

DEPT. 95, 4739 RAVENSWOOD AVENUE, CHICAGO

31 E. 17th St.
New York

227 Central Bldg.
Seattle
Toronto

559 Mission St.
San Francisco

634 I. W. Hellman Bldg.
Los Angeles

Bombay

For Prices in Canada, Apply to Our Canadian Branch, 57 Colborne St., Toronto

STRENGTH FOR THE ASTHENIC

Suprarenal insufficiency is one of the marked features of the asthenias. The blood pressure in these individuals is almost always low and the circulation poor.

The activities of other glands of internal secretion are always impaired.

That is why **pluri-glandular therapy** gives better results than suprarenal substance given alone.

HORMOTONE

which is a combination of thyroid (1/10 gr.) entire pituitary (1/20 gr.) ovary and testis, promotes oxidation, increases blood pressure and enhances metabolism by producing suprarenal efficiency.

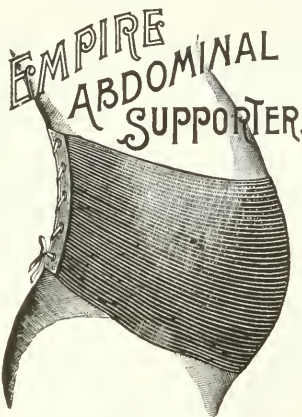
Dose. One or two tablets three times daily before meals.



G. W. CARNRICK CO.

410 CANAL STREET

NEW YORK, N. Y.



Superior to all others for the following reasons:

- 1st. It adapts itself to every movement of the body, giving strong and even support.
- 2nd. It produces warmth without irritation or sweating, as it is perfectly ventilated.
- 3rd. In pregnancy, corpulency, tumors or other cases of enlargement of abdomen, it supports weight of body from the backbone, relieving the sinews of their overwork.
- 4th. Its easy appliance (lace and draw on over head or feet).
- 5th. It is cheap, durable; it can be washed when soiled, proper care being taken to cleanse in lukewarm water and dry in shade.

In ordering give largest measure of the abdomen.

PRICES

8 inches wide	\$3.00
11 " "	3.50
8 " " Silk Finish	4.50
11 " " "	5.00
8 " " Double Rubber	3.50
10 " " "	4.00
12 " " "	4.50

The Empire Elastic Bandage

Specially Adapted for Varicose Veins

We invite the attention of the medical and surgical profession to the various merits combined in our bandages.

1st. **Its Porosity.**—The greatest in the "EMPIRE." It never causes itching, rash or ulceration under the bandage.

2nd. **Its Elasticity,** which will enable the surgeon or nurse to put it on at any required tension, and which will follow a swelling up or down, as the case may be, a feature unknown to any other bandage.

3rd. **Its Absorbent Properties.**—Greatest in the Empire.

4th. **Its Easy Application** to any part of the body, not being necessary to fold over, as with other bandages, as it follows itself with equal uniformity around any part of the abdomen.

5th. **Its Self-Holding Qualities.**—No bother with pins, needles and thread, or string, so tiresome to surgeons, as simply tucking the end under the last fold insures its permanent stay until its removal for purpose of cleanliness.

6th. The only bandage that is Superior to the Elastic Stocking for varicose veins.

Send \$1 for 3-inch by 5-yard bandage on approval



The Empire Umbilical Truss

Is an Abdominal Supporter with Button Inserted at Navel

Is made of the same material and possesses the same merits as the Empire Elastic Bandage and Empire Abdominal Supporters, and it is pronounced by all who have seen it to be the best in the world. All our goods are sent free by mail upon receipt of price, and money refunded if not satisfactory.

PRICES

Infant, hard pad	\$1.25	Infant, soft pad	1.50
Children, hard pad	2.50	Children, soft pad	3.00
Adult, hard pad	5.00	Adult, soft pad	6.00

ALL ABOVE PRICES ARE NET TO PHYSICIANS

MANUFACTURED BY



EMPIRE MFG. CO., 7 Spring St., Lockport, N. Y., U.S.A.

THE SINUSTAT

The Sinustat being used in the treatment of Splanchnic Neurasthenia, Visceroptosis, Gastrop-tosis, Enterop-tosis.



An appliance that makes Electro-therapy practical and profitable for the general practitioner. The use of the Sinusoidal Current is giving such positive results in a wide range of conditions that physicians everywhere are finding this Current a distinct asset to their practice.

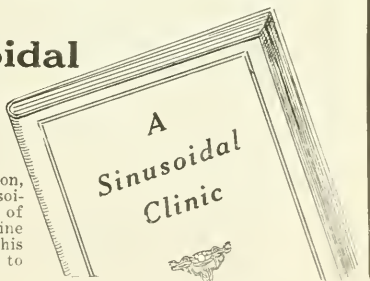
The Ultima Sinustat No. 3 affords a simple, convenient and comparatively inexpensive means of obtaining the Sinusoidal Current in the office or at the bedside of the patient.

It can be operated on either the direct or alternating current. The technic is simple. A pad is placed at the sacrum and an interrupting electrode at the spinal center from which the desired reflex is obtained. Modifications of this are regulated by the nature of the ailment treated.

Splanchnic Neurasthenia, Visceroptosis, Gastrop-tosis, Enterop-tosis, Bronchial Asthma, Chronic Constipation, Mammary Gland insufficiency, Flat Feet, Fallen Arches, Optic Atrophy and many other conditions. Considering the immense value of this appliance the cost is negligible.

FREE Sinusoidal Clinic

For the information of the Medical profession, we have prepared in brochure form "A Sinusoidal Clinic" which gives a resumé of the uses of Sinusoidal Current in medicine and an outline of the technic used in various ailments. This valuable little book is mailed free of charge to any physician on request while the supply lasts.



**Ultima Physical
Appliance Co.**

**186 North LaSalle Street,
CHICAGO, ILL.**

COUPON

Ultima Physical Appliance Co.,
Dept. C, 186 N. La Salle St., Chicago.

Please send me without obligation your brochure
"A Sinusoidal Clinic."

Dr.

(Address)

Hot Weather

is always trying to the elderly and debilitated. Fortunately, however, when these patients begin to show the ill-effects of Summer heat by a loss of appetite, impaired digestion, frequent attack of bowel trouble, weak and shaky nerves—and a real "heat exhaustion" threatens, many physicians have learned to rely on

Gray's Glycerine Tonic Comp.

Two to four teaspoonfuls in iced water, or on cracked ice, before meals will afford needed support, prevent the depression of bodily functions, and help the aged and weak to withstand the enervating tendencies of hot, sultry weather.

The Purdue Frederick Co.

135 Christopher Street, New York

AUTHORITATIVE EVIDENCE

(Photographically Reproduced)

Herewith is a photograph of Page 95, Vol 11, "Diseases of Women," as edited by H. Marion-Sims, M. D., and in Dr. Sims' own words, is recorded the high esteem in which he held *Hayden's Viburnum Compound* and the "great service" rendered in treating

DYSMENORRHEA

HAYDEN'S VIBURNUM COMPOUND

is as effectual therapeutically to-day as in the day of Sims, and will give you the same "great service" in treating your dysmenorrhea cases, as was rendered to Dr. Sims.

Prescribe, as recommended by Sims, in teaspoonful doses, "administered in hot water" every hour for three or four hours. See that the genuine H V C and not a substitute is dispensed.

Liberal samples of the genuine H V C willingly sent on request.

NEW YORK PHARMACEUTICAL CO.

Bedford Springs, Bedford, Mass.

Hayden's Uric Solvent has proven most effective in the treatment of rheumatic and painful joint conditions. Its value has been proven by years of clinical experience. Samples and literature on request.

DYSMENORRHEA.

95

It has been long known that rest is most efficacious in relieving dysmenorrhea. Some patients habitually go to bed during the menstrual process, finding so much relief from the position. There is nothing therefore new in the recommendation to rest at this time, but experience has shown that the positional treatment above described carries the effect still further. The treatment is particularly valuable in the case of young single women who are suffering from dysmenorrhea not of such severe character as to render internal treatment imperatively necessary. And indeed I have in several cases employed positional treatment with great success where no examination at all had been made, but where the symptoms and general history conclusively showed that the patients were suffering from commencing uterine flexion.

Positional treatment is also very valuable as an adjunct in cases where internal mechanical apparatus are in use.

Palliative Measures.—Rest, the horizontal position, postural treatment, as above described, are all of first-rate importance. The warm hip-bath, temperature too or even higher, is to be recommended. Copious vaginal injections of hot water are sometimes found very serviceable. Ether, compound spirit of sulphuric ether, camphor, and henbane are ordinary and very useful remedies. Gin and water is a common domestic remedy. Poultices with laudanum sprinkled over them, hypodermic injections of morphia, turpentine stupes, are other remedies occasionally employed. Suppositories containing opium or morphia are very effective, but the use of opium is not advisable unless under strict medical orders. Chloral and bromide of potassium are good remedies. Guaiacum (Dewees), black hellebore (Meigs), have been strongly recommended. Colchicum, cannabis indica, and in fact every sedative and anti-spasmodic in the pharmacopoeia, have been employed for the relief of the pain with more or less success.

[For severe dysmenorrhea I have frequently found *Hayden's Viburnum Compound* of great service, given in teaspoonful doses every hour for three or four hours.]

During the menstrual period great care is required that the bowels be kept regular, that the digestive organs be in an easily working condition, and that food be adequate but not in too great quantity. It should be known that it is dangerous to use cold baths during menstruation.

When appetite must be increased without the aid of exercise

INVALIDS are often unable to stimulate their metabolism with exercise, yet appetite must be increased, more food ingested and the plane of metabolism raised.

Many foods fail in such a situation because the vitamin they contain is associated with substances rich in calories.

"In such cases," says one of America's foremost physiological chemists, "Yeast appears to offer the best means for furnishing a relatively large quantity of the water-soluble vitamin together with a comparatively small proportion of calories."

THE importance of good appetite is brought out in one of the leading works on deficiency disease. Loss of appetite, says the author, interferes with the liberal consumption of food which is the first necessary step in maintaining health, and the depressed function of the gastro-intestinal tract interferes with prompt digestion and absorption and also with the prompt evacuation of undigested residue from the intestine which is an absolute essential of health and vigor.

Fleischmann's Yeast is a pure food, proved by strictly scientific tests to be potent in increasing appetite and raising the plane of metabolism.

Send for recently published free brochure on the manufacture, physiology, chemistry and therapy of yeast. Please use coupon, addressing **THE FLEISCHMANN COMPANY, Dept H-9, 701 Washington St., New York.**

New brochure on yeast therapy sent on physician's request

The Fleischmann Company
Dept. H-9, 701 Washington St., New York

Please send me free a copy of the brochure on yeast based on the published findings of distinguished investigators.

Name _____

Street _____

City _____ State _____



Converts the Distresses of Indigestion into a Smile

SOMETHING NEW

PEPTENZYME EFFERVESCENT GRANULES

**REED & CARNICK
JERSEY CITY, N.J.**

COMBINES the delightful qualities of effervescence with the well-known digestive properties of Peptenzyme.

The powerful and effective action of Peptenzyme, supplemented with the tonic and refreshing effects of effervescence, thus insures both

PERMANENT BENEFIT AND PROMPT RELIEF in gastralgia, nervous and fermentative dyspepsia, flatulence, atonic indigestion, and to relieve the gaseous fermentation that usually causes so much discomfort in digestive disorders.

It is palatable to the nth degree and gives the physician a cooling and refreshing beverage, free from any hint of medicine, yet pregnant with therapeutic value.

COMPLETE LIST OF PROTEOGENS

Proteogen No. 1—For inoperable malignant and benign tumors, including cancer, enlarged prostate and fibroid tumors.

Proteogen No. 2—For rheumatic conditions, not complicated with specific infections, accompanying or prior to the rheumatic symptoms.

Proteogen No. 3—For Tuberculosis.

Proteogen No. 4—For Hay Fever and Bronchial Asthma.

Proteogen No. 5—For Dermatoses, not due to specific infections.

Proteogen No. 6—For Chlorosis.

Proteogen No. 7—For Secondary Anemia.

Proteogen No. 8—For Pernicious Anemia, except the aplastic type.

Proteogen No. 9—For Simple Goitre.

Proteogen No. 9-A—For Exophthalmic Goitre.

Proteogen No. 10—For Syphilis.

Proteogen No. 11—For Gonorrhoea.

Proteogen No. 12—For Pneumonia and Influenza.

Proteogen No. 13—For Pyorrhea.

Proteogen No. 14—For Diabetes.

Clinical Experience

is after all, the deciding factor in determining the worth of any remedy, and a tabulation of reports from physicians all over the world shows that

PROTEOGENS

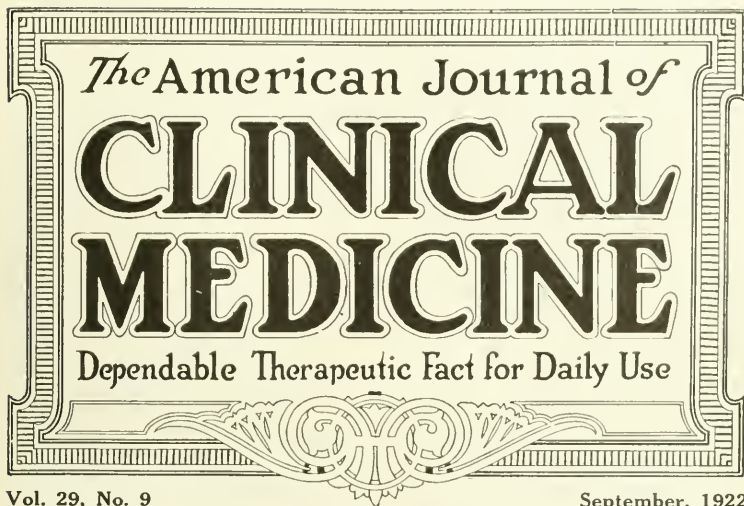
have been used with favorable results in 67% of the cases treated.

If you have a case with any of the diseases listed, that is not responding to ordinary treatment, remember the Proteogens can be relied upon for beneficial results in almost seven cases out of ten.

Your patients expect you to use every possible means to effect a cure, and because of the high percentage of favorable results obtained, it is to your advantage to use the Proteogen treatment regularly in your practice.

We have some interesting literature on the Protein Therapy and the use of Proteogens. Shall we send it to you?

FOUNDED 1828
THE W. S. MERRELL COMPANY
CINCINNATI, U.S.A.



Vol. 29, No. 9

September, 1922

"American Chemistry Menaced"

OUR editorial in the August issue of THE AMERICAN JOURNAL OF CLINICAL MEDICINE, entitled "American Chemistry Menaced," attracted wide attention. Thousands of reprints were ordered, and the story, as told, was read into the *Congressional Record*.

The chemical industry still is in danger, but the case is not as acute as it was last month. Through the influence of the American Medical Association, various state medical societies, The American Chemical Society and thousands of individual doctors and druggists, scattered all over the United States, Congress has seen its way clear to afford the American dye and chemical industry what is hoped will be ample protection through the Tariff Amendment. At this writing, the Bursum Amendment has just been passed, which fixes the duty on imported dyes and organic synthetic chemicals on the basis of American valuation, and at a rate which, it appears, will offset the difference between our money and the depreciated currency of European nations, particularly Germany.

This indication of support, on the part of Congress, is very encouraging, and the medical profession is to be congratulated upon its quick response to the call for assistance. This

magnificent victory indicates the growing strength of the medical profession. Sufficient praise cannot be given to the American Medical Association for its firm and courageous stand in this matter, and the entire medical profession is to be congratulated.

The government attack upon The Chemical Foundation is still in abeyance. No definite action has, as yet, been taken, although we understand that operators from the Department of Justice are at work in the office of The Chemical Foundation, trying to uncover some evidence which will justify the government in pushing its suit against Mr. Garvan and The Foundation. Absolutely nothing has been found, however, up to this time, that would afford the barest excuse for any legal action.

The influence of the medical profession has been felt in this matter, as well as in the adjustment of the Tariff to protect American industries. Thousands of letters and telegrams have been received by The Chemical Foundation, from prominent physicians all over the United States, offering sympathy, assistance and support. The immediate protest of the medical profession and the medical press, against unjust persecution of The Chem-

ical Foundation, has had considerable weight with government officials at Washington.

While no one objects to the fair and impartial investigation of the affairs of The Chemical Foundation, everyone interested in the future of American chemistry insists that there should be no prejudice or foreign influence brought to bear in deciding the future of this American institution.

The attitude of the American Medical Association and, we believe, of the entire medical and drug professions, with few exceptions, is that The Chemical Foundation be given credit for the good that it has done and for future plans for the encouragement and protection of American chemistry. It is the opinion of all who have studied this question that, if the government has any good and legitimate reasons for wanting to dispose of The Chemical Foundation, these have not, as yet, been divulged to the public.

The weight of legal opinion and the bulk of public sentiment, we believe, is with The Chemical Foundation, and we urge every physician to stand by and encourage The Chemical Foundation until some real reason is made public for a new line up. We believe that victory will again perch on the banner of those who are fighting for the protection of our new and promising medicinal chemical industry.

How is it possible to expect mankind will take advice when they will not so much as take warning.—Swift.

DO WE "ENJOY POOR HEALTH"?

In one of his inimitable sketches "Around the Town," which he designates as A Thousand and One Afternoons in Chicago, and which appear in *The Chicago Daily News*, Ben Hecht recently offered a discussion which is of great interest to physicians in so far as it purports to reproduce the opinions of one of us regarding the mental attitude of the sick as compared with that of the well. The first portion of Mr. Hecht's sketch is so apropos and, indeed, contains so much good sense that, for once, we are willing to edit at least one article with the scissors. Mr. Hecht's story is entitled "The Doctor's Diagnosis" and it is as follows:

"The doctor's eyes stared out of his office window. He smiled rather tiredly at our mutual friend, who was holding forth on the great strides being made by social hygiene.

"Yes," he answered when our mutual friend had subsided, "a few hazards are being removed. But—people still love to be sick. They dote on having diseases. There's not-

ing the average person so cherishes as the ailments which incapacitate him and make it unnecessary for him to work or face responsibility.

"People almost without exception magnify their diseases. They like to make out that they are suffering from weird and dangerous troubles and that death is imminent. This sort of lying or malingering serves a double purpose. In the first place, the sicker a person can convince himself he is, the more free he feels himself. Free to give vent to his egoism, to tyrannize, to demand things of others. A person in good health must curb nearly 98% of his impulses. That is, he must if he wishes to be considered a normal, natural, respectable person.

"But when he is laid up, with a nurse, a thermometer, worried relatives and inquiring friends, he can utilize the fear his loved ones have that he may die. He knows that, handicapped by this fear, his friends and relatives cannot assert themselves, and—everybody who has known an invalid knows the result.

"There is also another phase of malingering. People like to magnify their diseases just as they invariably exaggerate the hardships they suffered in a shipwreck or a snowstorm. By exaggerating the magnitude of their suffering they boast simultaneously of their prowess in overcoming each suffering. Whenever you hear anyone telling how sick he was, you can be certain that what he's really saying is: 'I had a terrible time. Most weaker constitutions would have succumbed immediately. But, owing to my superior nature, I managed to pull through and, by sheer nervous as well as physical stamina, I managed to recover.'"

By way of illustration, the doctor whom Mr. Hecht cites relates the story of a young woman who, only two weeks after her marriage, was virtually deserted by her husband; that is to say, her husband informed her that he had to go to New York as he had good business opportunities there and that he would send her money. He wrote her affectionate letters and sent her money, but he neither asked her to join him nor did he come back. The young woman loyally attempted to keep up appearances, the interested and searching inquiries of her relatives she answered in such a way as to make it appear that her husband was traveling very far but that he would soon send for her; she often resorted to subterfuge and falsehood in order to meet those same annoying questions. Finally, she developed a regular phobia,

expecting everybody with whom she came in contact to inquire after her husband, and she lost her mind. Mr. Hecht's doctor concludes that this woman's insanity is a spiritual malingering. She has made herself deliberately insane, he avers, so as to escape the responsibility of facing her horde of relatives and to escape having her pride torn to pieces by everybody.

The story is worth pondering. It may even open up possible solutions for many of our problems. If a man may, at times pray devoutly to be delivered from his friends, an invocation to be delivered from one's relatives often is even more in order.

As members of a self-eliminating profession, it would be an excellent idea for physicians to adopt the plan of obtaining annual retainers from the well to keep them well.—R. & C. Med. Pocket Quarterly.

THE LIMITATIONS OF INTRAVENOUS MEDICATION

Carl Voegtlin, of the Hygienic Laboratory, Washington, D. C., in his address read before the Section on Pharmacology and Therapeutics, at the seventy-third annual session of the American Medical Association (*Jour. A.M.A.*, Aug. 5), discusses, in a most acceptable way, the limitations of intravenous medication. After giving a history of the procedure and stating that, as early as 1657, the first intravenous injection was made on man, following which all conceivable substances were injected "indiscriminately", he goes on to discuss the therapeutic effect of the injection of suitable medicinal agents.

He considers that the intravenous use of arsphenamine and its substitutes has done more than any other single factor to popularize intravenous treatment; whereas, in former years, the average physician was inclined to regard an intravenous injection as a minor surgical operation, he now has familiarized himself with this technic. As a result, most of the respect for the ever-existing possibility of bacterin reactions resulting from intravenous therapy then vanish, in spite of the fact that careful observers, from time to time, voiced a warning against the careless and indiscriminate use of arsenicals by this route. He considers that it is surprising, considering the enormous number of arsphenamine injections given, that the reports of untoward reactions have not been more numerous. This demonstration of the relative harmlessness of intravenous arsphenamine injections has, he thinks, prompted physicians to apply this method within recent years

to other drugs and to other diseases, principally on the assumption that intravenous injection is of necessity followed by a more powerful therapeutic effect than is administration of the drug through other channels. The fact was forgotten that the intravenous administration of arsphenamine was simply an attempt to avoid pain and local reaction, and that it was not introduced in order to increase the therapeutic effect. The author wants to lay particular stress on this point, as this misconception seems to be quite prevalent among physicians and pharmacologists, and it is largely responsible for the present popularity of intravenous medication. He particularly calls attention to the data furnished by Fordyce, Craig, Harrison, Wechselsmann and others which add assurance of the therapeutic efficiency of intramuscular and subcutaneous injection; and, during the last three years, they have been able to establish this fact by well-controlled experiments on animals, using a quantitative method. Thus they showed that the parasitocidal effect of injections of arsphenamine and neo-arsphenamine given intramuscularly is as good as that of the same dosage given intravenously.

It having thus been shown that arsphenamine, when given intravenously, exerts no more powerful parasitocidal effect than when injected intramuscularly, and that the intravenous method was chosen in order to avoid local reactions, the question arises: Are there any drugs which, under certain conditions, give better therapeutic results when injected intravenously? The author believes that this question must be answered in the affirmative, as, for instance, when time is an important element in the treatment or when the drug is not sufficiently absorbed by other channels. The intravenous injection of quinine in malignant malaria, of strophanthine in certain cardiac cases, of diphtheria antitoxin in severe diphtheria, is not merely advisable but is absolutely indicated as an emergency measure. Under such conditions, the physician can not afford the delay incident to the administration of these remedies through other channels.

In passing, Voegtlin pauses to raise the question as to the unscientific claims made by certain commercial interests who advertise a great variety of drugs put up in solution for intravenous use, and then goes on to call attention to the various possibilities of injury to the patient which may follow the use of a faulty technic—or, for that matter, the injection of unsuitable drug. He says:

"Asepsis is an essential requirement. It is also perfectly obvious that care should be ex-

exercised not to inject any air, solid particles or oil droplets, on account of the danger of embolism. However, this can be avoided by proper technic and, if necessary, filtration of the solution before injection. Furthermore, it is clearly evident that care should be exercised not to allow any of the drug to escape into the perivascular tissues in case such solutions cause local irritation. These untoward reactions are under the complete control of the physician. It sometimes happens that thrombosis occurs in the vein, which usually makes it impossible to use this vein for future injections.

"It is, furthermore, of the utmost importance to realize that intravenous medication brings the drug into immediate contact with some vital organs, such as the heart and the central nervous system, and the drug concentration to which these organs are exposed is much greater, at least temporarily, than if the same dose had been given by the usual channels. Now, concentration is an all-important factor in drug action. All drugs, even the purest distilled water, are poisonous in higher concentration, and their beneficial effect is usually restricted to a range far below the toxic dose. Several hundred milligrams of caffeine can be given to dogs with immunity by hypodermic injections; whereas 5 milligrams per kilogram of body weight rapidly injected into a vein will cause death by cardiac failure. It appears to me not at all surprising, therefore, that serious reactions and even deaths sometimes occur from the rapid intravenous injection of such drugs as quinine, arsphenamine and its substitutes and strophanthine.

"To be sure, the chances for the occurrence of such deplorable results can be reduced, if not completely avoided, by a full realization of the principles involved, followed by logical procedure. It should always be borne in mind that the rate of injection of any drug must be slow enough to give the blood a chance to distribute it as effectively as possible. Theoretically, this can be accomplished by giving a relatively concentrated solution very slowly, or by using a very dilute solution."

Failure is only for those who think failure.—Fra Elbertus.

AS TO IRREGULAR PRACTITIONERS

At the last session of the American Medical Association (St. Louis, May 1922), Dr. W. S. Rankin, secretary of the North Carolina State Board of Health, read a paper in which he inquired into the mutual interest of the medical profession and the public. In closing the discussion, Doctor Rankin referred to the activity or inactivity of the health officers in dealing with sectarian medicine. The manner in which this problem is dealt with, places the onus clearly upon the medical profession itself. Doctor Rankin said:

"The state representatives come to the state capitol and pass laws. Those laws reflect the feeling of the people back home. They pass

laws regarding sectarian medicine because the people back home have not been educated against the evils of quackery."

It may be objected that the laws passed by the state representation do *not* reflect the feeling of the people back home, but that they rather express the wishes of the bosses and indicate the influence of lobbyists. In so far, issue may be taken with Doctor Rankin. However, his further remarks must be accepted as justified. Doctor Rankin continues:

"If physicians were organized and were in touch with collective thought, there would be no man in the state legislature voting for (Chiropractic and other sects. It must come back to the collective work of the men in the ranks. In an organized county in North Carolina, lectures are to be given to the people once a month dealing, among other things, with sectarian practice, Chiropractic, Osteopathy and all the other false doctrines that have preceded them, and there will be no legislative sentiment in support of them."

If it can not be accepted as a rule that the state representatives pass laws regarding sectarian medicine because the people back home have not been educated against the follies of quackery, and, if the passing of these laws must be attributed rather to intensive lobbying on the part of sectarian, patent-medicine, "medical freedom" interests and such, it must be granted that, if physicians were organized and were in touch with collective thought, there would be no footing for Chiropractic and other sects.

Doctor Rankin demands that the general practitioners should become active in public-health work which consists largely in the general education of the public regarding the meaning and importance of efficient health administration. In order to influence popular thought efficiently and correctly, it goes without saying that physicians themselves should inform themselves concerning the details of those sectarian teachings and claims, the truth and justice of which they deny but, often, without affording proof for their adverse opinion. It stands to reason that a physician who contents himself to call an ignorant pretender (for instance, a Chiropractic) a quack, letting it go at that, will lay himself open to the charge of jealousy, of a dog-in-the-manger attitude, and worse. If, on the other hand, he informs himself of the actual methods pursued by irregular practitioners and if he is prepared to show the baselessness, the impossibility and the absurdity of their claims, his opinions, even though adverse, will carry much more weight. After all, no matter how some people may criticize physicians as seeking their own selfish interests, they still know very well that, in time of stress,

they would go to these same regular medical practitioners and would leave charlatans severely alone.

In order to instruct their patients and others correctly regarding sectarian claims and to enlighten them as to any merits (or the reverse) that may be inherent in irregular cults of healing, physicians should inform themselves of the actual teachings that are issued by followers of such irregular cults. Regarding Chiropractic, as it happens, there are three communications that have recently come to our attention and all of which throw an interesting, if not very edifying, light upon the "practices" of the chiros.

There is, first of all, a series of seven articles communicated by Mr. Severance Johnson to *Leslie's Weekly* and appearing in the issues of January 7 to March 18, under the general title: "Is it Chiro-quack-tics?" Then there is an article by Mr. Channing Frothingham entitled "Osteopathy, Chiropractic and the Profession of Medicine" which appeared in the *Atlantic Monthly* for July. Both these writers are laymen from the point of view of the medical profession. However, a recent issue of the *Journal of the Medical Association of Georgia* contains an article by Dr. George Dock, of St. Louis (reprinted in the *Official Bulletin of the Chicago Medical Society* for July 22), which describes an unofficial visit to a Chiropractic school, namely, "the fountain head" of Chiropractic, "the mother school"; in other words, the Palmer School of Davenport, Iowa. Needless to say all three articles are full of interest and of instructive information which should be absorbed by those physicians who desire to judge Chiropractic at least with a degree of justice. There may be other articles. The three will serve our purpose beautifully.

They show conclusively that the claims of the Chiropractic school are not sufficient to establish its title to being a separate school of healing. Whatever is good in the methods of Chiropractics is hardly new and can be applied by any physician who chooses to inform himself of the facts. This refers mainly to the therapeutic method characterized as "the Chiropractic thrust" which, under certain circumstances, is beneficial. However, the Chiropractic thrust may not be applied indiscriminately, nor may the adjustments be limited to it. Under all circumstances, a careful examination should precede any manipulative mode of treatment.

The "theories" propagated by the Chiropractic school as to the causation and nature of disease are so absurd and untenable that they

do not merit even passing attention.

The principal point that we wish to make in this editorial is, that physicians should refrain from condemning "those others", root and branch, and from depriving themselves and their patients of possible benefits. They should rather study claims that are advanced, no matter what their source may be, and should adopt those portions of them that are promising.

Whatever is for the benefit of the patient, whatever can help to bring him back to health, is a legal and a proper means for the regular physician to employ.

Genius is only the power of making continuous efforts. The line between failure and success is so fine that we scarcely know when we pass it—so fine that we are often on the line and do not know it. How many a man has thrown up his hands at a time when a little more effort, a little more patience would have achieved success.—Elbert Hubbard.

"CLINICAL MEDICINE" AND SPECIALISTS

Every now and again a subscriber informs us regretfully that he has no further use of *CLINICAL MEDICINE*, for the reason that he is limiting his practice to one of the specialties. On the other hand, there are a good many specialists on our subscribers' list who inform us that *CLINICAL MEDICINE* helps them to keep in touch with the trend of thought in general medicine; and that they continue reading *CLINICAL MEDICINE* deliberately and with benefit.

We believe that the latter have the right idea. A man may be ever so good a specialist; if he is not a "general man" at the same time, he can not do the best for his patients. No specialist can afford to treat his patients exclusively from the viewpoint of his specialty, nor can he afford to pay attention solely to that organ in which a particular malady has localized. Invariably, there are disturbances elsewhere in the organism and, often, the specialist needs to keep his viewpoint general rather than specialized; he has to maintain an open mind and remember that the human body is a collection of many organs, all of which are interdependent and all of which must be functioning normally for good health to be maintained.

It follows that even specialists can well afford to read journals like *CLINICAL MEDICINE* and that even they will find something of use in its pages.

It also happens that physicians, old subscribers, write us that they have retired from practice and can no longer keep and read medical journals. Here, again, there is an obverse aspect to the medal, in as much as other retired

physicians tell us that, despite their retirement from practice, they can not do without CLINICAL MEDICINE whose monthly visits they look forward to with pleasant anticipation and the deliberate perusal of which they greatly enjoy.

That sort of thing is naturally very pleasing and we are happy to know that we can give a few pleasant hours even to those who are no longer in the fight and who are resting from their labors.

Failure! There is no such word in all the bright lexicon of speech, unless you yourself have written it there! There is no such thing as failure except to those who accept and believe in failure.—Elbert Hubbard.

THE NARCOTIC-DRUG EVIL

In connection with Doctor Goetz' article, "The Problem of the Opium-Addict," that appears in another department of this issue of CLINICAL MEDICINE, certain stories are of interest that are frequently told in the daily papers and according to which narcotic drugs are imported into this country and peddled by bootleggers, not only in the large cities but even in country towns and villages. If we could believe the newspaper writers, we should have to conclude that the narcotic-drug problem is far more serious even than is that presented by infraction of the Volstead Act.

Quite recently, it was asserted that there exists "a gigantic narcotic ring operating in the United States, with agents distributed throughout Europe and Asia." It was reported that morphine amounting to \$50,000 in value was discovered, secreted in 551 bales of old rags that had been shipped to this country from outside.

While this report referred to shipments received in an eastern port, a story was told in another paper according to which five ships, arriving in recent weeks from the Orient, have attempted to smuggle into the United States more than \$200,000 worth of forbidden drugs.

This amount of "dope" was found through the vigilance of the customs officials. It is said that no one knows how much may have been brought through successfully despite all the efforts of the customs men.

If it is considered that these two stories refer to only two of the numerous ports through which contraband may be introduced, and if it is realized that there are other avenues that may be and are utilized by the agents of those responsible for this outrage, it must be admitted that the problem is a serious one.

In this last-named newspaper story, it is asserted, also, that there exists a world-wide

ring of traffickers who reap incalculable profits out of drug addicts. It is a ring, it is said, which has an aristocracy, a middle class and a peasantry. The first are the men—in Paris, London, New York, San Francisco—who direct the large moves in the game. The middle class are the wholesale peddlers, who do not themselves use the stuff. The peasantry are the retail peddlers, frequently themselves victims. We quote:

"It is easy enough for them to get it. The British government in India subsidizes the growers of opium poppies. It supervises a monthly auction sale, at Calcutta, of the manufactured opium. Here the upper strata of the dope rings get their supplies.

"It has been estimated that three tons of opium will fill the medical needs of the world for a year. Last year, in India alone, over 1,200 tons were produced. Then there are also Persia, Turkey and, latterly, Greece as producers.

"These facts, coldly stated, without even mentioning the human degradation of which they are the beginning, are reason enough why the government of the United States should call an international conference to grapple with the dope problem.

"We have a good law on our federal statute books now, the Jones-Miller act. It will control the legitimate manufacture of opium and its derivatives in this country, if rigidly enforced. It will stop some of the illicit trade at our ports and borders.

"But, while there is all this raw material in the world, there will be conscienceless men and women ready to engage in its illicit distribution.

"There are several resolutions in committees of both the House and Senate calling for just such a conference, looking toward just such action.

"One of them has got to be passed. And it must then be put into execution by the President and the Secretary of State.

"Only so can we come to grips with this evil."

We have reason to admit that this business of illegal importation of narcotic drugs is a thriving one and that its suppression constitutes one of the many serious tasks confronting the government. The solution is rendered the more difficult through the fact that the patients avoid giving evidence and information through which the drug peddlers and their superiors might be apprehended. To a certain degree, we believe, physicians might be of considerable assistance in this work of discovering and destroying the agents responsible for the illegal drug traffic, by wise and persistent questioning of patients. In our opinion, physicians might do great good work and might benefit their country by taking deliberate and persistent steps whenever opportunity offers to discover those responsible for the illegal sale of narcotic drugs and by transmitting the information to the proper govern-

ment officers at Washington.

It seems to us that such a procedure could not be objected to by physicians and that it could in no wise be viewed as undignified detective work. On the contrary, it would contribute to allay the evil of drug addiction which is becoming more and more pernicious in its evidence, and which appears to be even more widely disseminated than was the case some years ago.

A human heart can never grow old if it takes a lively interest in the pairing of birds, the reproduction of flowers, and the changing tints of the autumn leaves.—Mrs. L. M. Child.

MATERNITY CENTER ASSOCIATION

The Maternity Center Association of New York, an authority on matters of maternity protection, announces its publication of a series of twelve "Talks to Mothers" for the benefit of women in all parts of the country. It is the first attempt of the kind in the United States to undertake on a national scale to impress women with the vital importance of complete maternity care.

It has been said that more women between the ages of fifteen and forty-five die from causes incident to maternity than from any other cause except tuberculosis. The majority of these deaths are due to ignorance, to the fact that the mothers didn't know that care is necessary if their lives and the lives of their babies are to be protected. It is the function of the new publications to dispel that ignorance, to convince mothers that they must seek proper medical and nursing care.

The scope of the pamphlets is suggested by their titles: "Life's Richest Offering", "A Message to Husbands—and Wives, too", "The Growing Life", "Keeping up Appearances", "Watch for Nature's Signals", "Preparation for the Newcomer", "Getting Ready for the Great Event", "The Day Your Baby Comes", "The Lying-in Period", "Starting Baby Right", "Aftercare of the Mother", "The Foundation of Child Life".

It is planned to distribute the pamphlets to a great extent through nursing and public health organizations which are closely in touch with local conditions in their own communities. Expectant mothers will be encouraged to present their cases to those institutions and receive personal advice and direction.

"It is not our purpose to try to supplant the doctor or nurse," said Miss Nancy E. Cadmus, R. N., general director of the Maternity Center Association. "The expectant mother is urged at every opportunity to place herself under

expert professional medical and nursing care.

"We do not believe that any woman should rely on printed instructions alone in so important a matter as motherhood, for each case presents its own idiosyncrasies and needs individual attention. The burden of our message is that the woman should see her doctor or nurse as soon as she knows she is going to have a baby and remain under their care until her final examination, six weeks after the baby is born.

"Dr. Haver Emerson, former Health Commissioner of New York City and an active member of our Medical Advisory Board, estimates that only one woman in seventeen in the United States receives the benefit of modern medical and nursing science at childbirth. The result is that each year more than 20,000 women sacrifice their lives on the altar of maternity, more than 100,000 babies die under the age of one month, and more than 100,000 babies are born dead. According to the latest figures of the Children's Bureau at Washington, eighteen countries, including Italy, Sweden, Japan, Spain, France and New Zealand have a lower maternal death rate than the United States.

"The only way to solve the problem is through education. It is not so much that women do not know what steps they should take to protect their lives and their babies, but they do not realize that care is necessary. It is our task to find out just what are the essentials of maternity protection. This we are doing through intensive study of mothers in one district in Manhattan. The routines, or nurses' procedures, we have worked out are now widely accepted as standard.

"But an even greater and more important task lies in convincing mothers that care is needed. If we do this with only a fraction of the women who will become mothers this year, we shall have accomplished one of the most useful public services it is possible for an institution to render."

THE CAUSE OF DISEASE

Before the forty-fourth annual meeting of the Arkansas Medical Society (Eureka Springs, June, 1920), Dr. D. C. Walt, of Little Rock, Arkansas, read a paper entitled "The Fundamental Cause of Abnormality." He declared that each individual is good or bad from every viewpoint on account of the conditions under which he exists. He referred illness, which is physical badness, to faulty diet and wrong hygiene, and claimed that, in order to be really well and in good health, we should not eat merely because things taste good and more than we want, but that we should give the care and reason to people that we do to the horse and others of the lower animal life.

Doctor Walt deals frankly with the purely physical aspects and considers, in that respect, men and women and children as animals.

While nothing of moment was brought out

in the discussion, Doctor Walt himself, in closing this, made some strong additional points in favor of his position. His point is, really, that people should be kept in a healthy condition and that illness should not be permitted to develop. He says, for instance: "I try to imitate the man who has succeeded, and he is the one who makes good animals. He feeds them owing to their condition, the weather, and what they have to do. No one that knows would feed the race horse as he would feed the draft horse, nor the promiscuous cattle as he would the beef cattle. Still, this same man is so inconsistently educated that he knows that corn and wheat can hurt the horse; he does not seem to know that cakes and cornflakes can hurt himself; so he butters his bread on both sides, so to speak, that his family and he might eat more, because he has been taught that 'bread is the staff of life.' He feeds himself from appetite and his horse from reason."

The reprint of Doctor Walt's paper was sent to many medical authorities in Canada, England and the United States and also to the members of the Peace Conference, at Washington. In the replies that Doctor Walt received to his request for criticisms, several of his correspondents laid stress on the fact that the hereditary factor, which he had neglected entirely, is of at least as great importance as is the factor of environment. Most of the replies discuss Doctor Walt's article appreciatively and bring out some interesting new points.

To us, Doctor Walt's argument seems to be hopelessly one-sided. It is quite true that he has failed to consider the factor of heredity, which is of fundamental importance and which is a determining agent in the problems of eugenics. Far more, however, it seems to us, stands out the essential difference between man and animals which makes it impossible for us to apply to ourselves without considerable modification, the diet and hygiene enforced for animals.

Doctor Walt says, for instance: "The horse is frequently cared for in such a way that he maintains a high point of adjustment. He comes from the barn practically three hundred and sixty-five days in the year with arched neck, perched ears, dilated nostrils, pulling against the bits and pawing the air to go, expressing development to the point of limitation. This is often accomplished by the man with little or no book learning, on account of the system which represents intelligence and time combined with every day's care."

Seemingly, the placid cow has been held up

by other writers as an example to follow, and we have recorded the objection that we can not eat like cows, for the simple reason that we can not live like them. We do not have the dental and gastrointestinal apparatus to take care of the food best adapted to cows, nor do we have the time for rumination.

In our opinion, Doctor Walt has struck a very important note; but he has viewed his problem only from one angle, which is responsible for the fact that his argument is one-sided. In no case is disease merely an inability of one or several organs of the body to function properly. In every single instance of ill health the patient's mentality and (even more important) the patient's psyche are disturbed and both require just as careful reeducation, training and treatment for the restitution of health as does the physical organism. We believe that here lies the most important point upon which one will have to differ with Doctor Walt's assertions. Nevertheless, these deserve every consideration and should be developed along indicated lines.

There is no doubt about it, if we lead normal lives, physically, mentally and psychically, if we train our children not only to live and eat right but also to think and act right, they will be far less susceptible to ill health, far less likely to become diseased.

In the last instance, though, a point obtrudes itself and that is, whether it is desirable to be so unconditionally and hopelessly perfect as has been claimed by many. One of Doctor Walt's correspondents strikes rather a kindred cord in his reply. His remarks are so much worth while that we will quote some of them, but without admitting that we subscribe to, or approve unconditionally of, everything he said. He asserts:

"For instance, after my day's work today, I stepped into a friend's and have just come from a dinner that included every form of protein poison, from caviar, wines, liqueurs, cigars, decomposed cheese, punch, pastry and four kinds of meat, and I'm sitting here full of pep, at 1 a. m., writing this letter, while the fellow across from me ate milk toast, did not smoke or drink and went home at 10 o'clock all knocked out. Well, the answer is, that I am one kind of an animal and he is another. If we were both fed rationally, I'd blow up and commit murder, because I have such a devilish good appetite and would go stab if I did not go to it, and he is another kind of an animal, and if he lives long enough, he is going to commit suicide because of the monotony of being good.

"A horse is a horse because he is a horse—a Negro is a Negro because he was a monkey not

so long ago and wore most of his hair off and lost his tail and didn't wander far enough away from the hot belt to get rid of his pigment. A Negro was a monkey years after us white people were Negroes and he is going to be either a Negro or a monkey, according to his education and environment. If we all were fed just what was good for us and no more, we would all look and act like Mellin's Food babies, all be fat, fair and flabby and no pep.

"For me, give me eighteen hours' work each day, twenty cigarettes, six cigars, a few pipes between smokes and about three weeks' work a day, and, Oh Boy! lots of cats, and the worse the better, and I'm happy. But, when I get on the sensible diet, I certainly am the Prince of Devils and no fit person to associate with. I believe doctors should tell other people what to do, but not do it. I never pose as a horrible example. If your friend Doctor Walt ever comes north, send him in and I'll entertain him, and if he has any kind of regular gastrointestinal system and can stand the strain, I'll send him home with fond memories and a cultivated taste for those things he shouldn't have."

This sounds "just like a man," and a man's man at that! There is no Sunday-school stuff in it; it was written by one who can do a mighty good day's work, who is human and who knows it. With this, we believe the question is left in abeyance. It merits discussion.

Anybody who imagines that the prohibition amendment could be repealed in this generation will learn his mistake by watching elections.—Arthur Brisbane.

TYPHOID FEVER IN THE CIVIL POPULATION SINCE THE WAR

Charles Achard, of Paris (*Lond. Lancet*, April 15, 1922), asserts that, while typhoid fever is still widely spread in France, it is diminishing in frequency and is not to be compared with the disease as it presented thirty or forty years ago. This attenuation, he thinks, depends properly on therapeutic progress, especially on the care given to cleanliness and antiseptics, to the practice of refrigeration and to the régime of food applied to patients. The fact, however, remains that much more might be done to fight against the disease. An efficient system of prophylaxis might be instituted. He says:

"Two orders of means may be implied. Outside the organism, to suppress the germs of infection in everything which they can contaminate, and, before, all, in potable water. In the organism itself, to create by means of immunization the refractory state. To destroy the germs in external objects is to make a collective prophylaxis. To vaccinate the organism is to make an individual prophylaxis. The former has been practiced and proved for long enough. The latter is more recent and is only beginning to make final proof of its efficacy."

In discussing the permanence of immunity gained by antityphoid vaccination, he points out that, while it remains to be seen just how long immunity does exist, as a matter of fact, two and a half years after the end of the war, it is already evident that the immunity conferred by vaccination is of considerable duration. The question is an important one, not only from the army's point of view but for the entire civil population. For, if the protective effect of vaccination is only temporary, the vaccination of civilians could only be recommended as an occasional measure during times of epidemics; but if the effect is a permanent one, vaccination of the entire population becomes a valuable measure everywhere and at all times.

Considerable evidence that the immunity conferred by vaccination is lasting is presented. Certain statistics drawn up by the *Administration de L'Assistance Publique*, in Paris, are presented *per contra*.

To summarize, it seems to be proven that vaccinated subjects have a much reduced susceptibility to the disease. Further—and this second fact is not less important—it appears that, when vaccine immunity is not complete, it may, nevertheless, provide a degree of resisting power which greatly diminishes the severity of the disease. These conditions are identical with those which long experience has shown to apply to vaccination against smallpox—complete immunity of long duration, and attenuation of the disease when that immunity has partially been lost. One is, therefore, naturally led to consider the employment of vaccination against typhoid on the same lines as that against smallpox; that is to say, systematic and widespread vaccination of the civilian population, and periodic revaccination, particularly in times of epidemics.

HEALTH INSURANCE THROUGH DENTAL PROPHYLAXIS

We are informed that, at the suggestion of Medill Council, The Tribune Company, of Chicago, has provided the services of a dentist for the benefit of all employees of The Tribune Company.

The dentist will examine and clean the teeth of Tribune employees without charge. He will furnish each employee, whose teeth have been examined, a report which may be handed to the employee's own dentist in cases where repairs are required. The Tribune Company's dentist will perform no repair work himself

and will, therefore, not indulge in unfair competition with dental practitioners.

It is self-evident that the Tribune Company will find this step to prove a paying investment, because of the early detection of diseased conditions in teeth and gums, which thus may be removed at a time when they still are amenable to treatment. Losses from frequent absenteeism and, possibly, excessive rates of turnover will be avoided. However, in a general way, also, the new departure is to be commended. It shows that large employers of labor find it advantageous to do everything possible to preserve the health of their employees.

THE COST OF PROHIBITION ENFORCEMENT

The critics of the prohibition amendment often assert, and this same claim is repeated over and over again, that the enforcement of prohibition is very costly to the Government and that untold sums are being spent for that purpose. On that score, a news item appearing recently in the daily papers, is of considerable interest. While it refers to the state of Illinois specifically, it may be asked whether the same is not true for other states likewise. We copy the item in question without further comment:

"Prohibition enforced in Illinois was declared to have paid a net profit of about 30 percent on the investment, in a report of compilations of the Anti-Saloon League made public here today by George Yale, district superintendent of the league. For every dollar expended by the counties for investigations and prosecutions, more than three dollars, Mr. Yale said, has come into the county coffers in fines and forfeitures.

"The state law provides that fines and forfeitures shall be applied to paying the salaries of state's attorneys and their assistants, and, if there is any of the fund so collected remaining after payment of these salaries, it shall go into the county school distributable fund.

"Lake county with the collection of \$30,919 in fines seems to have shown the greatest activity in prosecutions, according to Mr. Yale's figures."

SURGICAL SEMINAR*

A Case and a Problem

It was my intention to publish, for this month's diagnostic exercise, two cases of brain injuries; but, at the eleventh hour, a commu-

*The case report and problem presented herewith should have appeared at the end of the Surgical Seminar on page 676. For lack of space in its proper place, we print it in the editorial department.

nication from Dr. A. Maxwell Lightstone, of Montreal, Canada, caused me to change the plan. I publish Doctor Lightstone's letter, and request him to furnish us the solution of the problem in time to reach me not later than November first.

In the meantime, solutions should be sent in and I myself will endeavor to diagnose the case, placing the reply in the hands of the Managing Editor at once.

I embrace the opportunity to announce that letters addressed to me, care of THE AMERICAN JOURNAL OF CLINICAL MEDICINE, do not reach me until late, unless the street address of the JOURNAL is given. Readers who desire their letters to reach me promptly should use my office address: Columbus Memorial Building, Chicago, Illinois. Dr. Lightstone writes:

Regarding Case 2, permit me to give you the history of a case I saw, two years ago. Patient, aged 42. Male, White. Complained of pains in right lower quadrant, for two days. Pulse 92. Temperature 99.6° F. Pain over McBurney's point. Muscular rigidity.

I diagnosed appendicitis. Called an eminent surgeon on the staff of the Royal Victoria Hospital, of Montreal, in consultation who made the same diagnosis.

While the patient was under observation at the hospital, he developed a slight cough and the pain in the abdomen was slightly diminished. The x-ray enabled us to make a correct diagnosis of diaphragmatic pleurisy.

[There is no doubt that this case began as an appendicitis. This disease is apt to cause a large number of complications. The study of this case presupposes a fairly adequate narration of the results of the physical examination of the chest.—G. M. B.]

Doctor Lightstone presents Diagnostic Problem No. 4.

"A white male, aged 34, merchant, seen by me last September, came to me in the evening complaining that he was ruptured. After lifting through the day a number of heavy cases in his store, he noticed a dragging pain in his left testicle.

"Examination of the testicle showed it to be normal. There was neither pain on palpation nor sign of a hernia. There were no abdominal symptoms. Pulse normal; temperature normal; blood pressure normal; lungs normal. There was no evidence of previous venereal infection. Palpation of the back revealed slight pain in the region of the right kidney.

"The diagnosis I made was corroborated later in the hospital."

Leading Articles

The Treatment of Epilepsy, Incipient and Chronic

By EDWARD A. TRACY, M.D., Boston, Massachusetts

School Physician, Boston Public Schools, in Charge of the Clinic for Nervous and Epileptic Children, Forsyth Dental Infirmary, Boston

EDITORIAL COMMENT—In the following pages, Doctor Tracy makes good the promise given in his earlier communication (this journal, July issue, p. 477) to outline a treatment for patients afflicted with incipient or chronic epilepsy! The remedy employed by Doctor Tracy has been well known to homoeopathic and to eclectic physicians for many years. However, it does not comprise the whole of the treatment. The chemical and the vogotonic irregularities of the epileptic call for correction likewise.

SCIENTIFIC treatment for any disease presupposes a knowledge of that disease, and, the more complete our knowledge, the better the treatment. Thus, diphtheria is known to be caused by the Klebs-Loeffler bacillus which produces a toxin that can be lethal in its effect upon the non-immune. Research work discovered a neutralizer for this poison, an antitoxin, that is curative. Further research by Schick showed that non-immune subjects could be discovered by a certain skin reaction and rendered immune by the injection of antitoxin. Scientific investigation, research work, has therefore brought about the conquest of diphtheria, and this conquest is now being realized on a large scale by efficient work being done among the children in most of the large cities of our country.

The conquest of idiopathic epilepsy is likewise to be made by scientific research and by the utilization of the facts disclosed by such research by general practitioners everywhere.

Diphtheria is a bacillary disease, mostly acute, and, with the banishment of the bacilli, the disease ceases. Epilepsy is not a bacillary disease; investigation has shown that the supposed neurococcus epilepticus, discovered a few years ago in a surgical environment, was in reality a contamination and due to errors in technic. The wave of surgery to eliminate the supposed habitat of this imaginary germ, the big bowel, has had the useful purpose, let us hope, of saving other epileptics from the surgeon's knife. Surgery has no place in the treatment of idiopathic epilepsy except by way

of experiment.

Better Knowledge, Better Treatment

Scientific investigation is making progress in the problems connected with the cure of epilepsy, and enough has been accomplished already to enable practitioners to do much in the conquest of this disease.

This increase of knowledge about epilepsy, touching even its essential causation, is due primarily to the fact that utilization has been made of the advances made in general science in the investigation of the disease. For example, the discovery of the scientist Roentgen. With the x-rays, I have shown that in chronic epilepsy there is a lack of calcium in the bones. The corollary of this finding is, that in chronic epilepsy there is a disturbance of the calcium metabolism, a deficit, that must be met in the rational treatment of that phase of the disease.

Furthermore, in the last thirty years, discoveries have been made by physiologists in their studies of nerve tissues, that are revolutionary in character, when applied to our investigation of epilepsy, inasmuch as they disclose the nature of the disease.

Thirty years ago, much was taught in the medical schools about the sensory motor system, consisting of the brain and the spinal cord, and scarcely anything (because not much was then known) about the vegetative nervous system, consisting of its two branches, autonomic and sympathetic, opposite in function; the great system of nerve fibers controlling all the tissues of the body, including, of course, the control of the brain. This is the nervous system, espe-

cially its sympathetic branch, that has been found to be diseased in incipient and in chronic epilepsy. Slight wonder that so little has been known of the nature of epilepsy, when our knowledge of the nervous system found always to be affected in epilepsy, the vegetative system, is only of recent growth. And this explains why an investigation of the vegetative nervous system in epilepsy has proven so rich in important findings (already described in the July issue of CLINICAL MEDICINE), important from the diagnostic point of view, since their presence determines the case to be epilepsy; but more important still since they showed incipient epilepsy to be characterized by a demonstrable hypertonia of sympathetic fibers that can be overcome by the drug ænanthe, with the sequential disappearance of all symptoms of the disease.

Epilepsy—Incipient and Chronic

In this paper I shall deal with the curative treatment of incipient epilepsy, and offer a contribution to the scientific treatment of chronic epilepsy. In order that a clear idea be acquired of the terms incipient and chronic, as here used, I shall make some preliminary statements.

Epilepsy is a progressive disease of the vegetative system, with an incipient and a chronic stage, and it not infrequently progresses into dementia. The epileptic attacks are described as *petit mal* and *grand mal*, the little malady, and the big malady, meaning, of course, the same disease differing in the character of its manifestations. How astonishing is the acumen of the early French observers who described this disease! Could anyone suppose that a child with a momentary unconscious stare suffers with the same disease as the adult who, with shrill, weird outcry, falls unconscious suddenly, has tonic convulsions, becomes livid, has clonic convulsions, stertor, micturition, and hebétude? Careful observation taught those fathers in medicine the identity of the disease in both the cases I have described and, today, scientific examination shows in each case the objective signs of epilepsy to be present, thus demonstrating this identity of disease in *petit mal* and *grand mal*.

In incipient epilepsy, the attacks are of the *petit-mal* description: sudden pallor; attacks of dizziness; dizzy headaches; slight lapses of consciousness, staring spells; sudden weaknesses; fainting attacks; sudden trembling; sudden attacks of nausea and vomiting of unaccountable origin. These various *petit-mal*

attacks have been found in carefully taken histories of the chronic disease, and were present

from six months to two years before the appearance of the first *grand-mal* attack (convulsions).

By the term chronic epilepsy, I mean the chronic disease as manifested by recurring convulsions. Perhaps, the term chronic *grand mal* would be more appropriate, inasmuch as there are cases of *petit mal* lasting for several years with never a convulsion, and which can be justly termed chronic *petit mal*, and not incipient epilepsy. Chronicity, measured by time, is always of importance as regards the success of treatment. In chronic epilepsy with convulsions, there is a demonstrable hyperirritability of the brain cortex together with the demonstrable diseased condition of the vegetative nervous system. Indeed, the fact of convulsions may be taken as showing undue cortical irritability.

Physiologic Wrongs in Epilepsy

It occurred to me that this cortical irritability had a relation with the calcium deficiency found present in the chronic disease. Sabatini has shown that cortical irritability was lessened by the application of calcium salts to the brain surface. In tetany (produced by parathyroidectomy), there is found an increased elimination of calcium, together with a lessened calcium content in the brain. There is, indeed, considerable experimental work reported that permits us to look upon the parathyroid secretion (hormone) as aiding the fixation of calcium in nerve tissue. Acting upon the consideration of this experimentation, together with the finding of a calcium deficiency in chronic epilepsy, I have tried out the ingestion of calcium lactate plus parathyroid substance in those cases characterized (as has already been mentioned) by a hyperirritability of the cortex. It has proved effective in many cases, especially in cases in which the treatment has been used before the convulsive stage had become very chronic. From the results observed in those cases and from experience with other cases with nerve tissue irritability, it appears to me fair to assume that lack of calcium in the cortex plays a leading part in the cortical instability of early epilepsy, and that this calcium hunger of the cortical cells can be satisfied by the ingestion of calcium lactate plus parathyroid substance, resulting, in the early treated cases of *grand mal*, in a condition of normal cortical stability.

When the condition of *grand mal* has become chronic, when convulsions have recurred for a year or longer, then indeed our problem is not the simple one of cortical hunger, more akin to physiology than to pathology; for, with

the chronic recurrence of convulsions, comes the cortical gliosis found in chronic idiopathic epilepsy, which, in itself, is a probable source of irritation; and how can we expect restoration of function in a delicate structure that is damaged morphologically? True, this morphological damage is not a glaring one. Only recently, with high-power microscope and special technic has it been found constant, and, pray, do not take it too pessimistically nor let it block therapeutic endeavor to ameliorate the very chronic disease. I do not take it too seriously myself, seeing that I am searching for a drug that will safely combat the vicious reflex vasoconstriction that I have found to be a part of the chronic disease. There are experimental reasons and direct observation of the facts in Lerich's case for regarding sudden vasoconstriction of brain vessels as the immediate provocative of convulsions in epilepsy. As I have just remarked, there is a vicious, intense, reflex vasoconstriction evokable in the skin vessels of the chronic epileptic, and, so far, I have found no means to control it. However, the finding of this outstanding fact in chronic epilepsy, a vicious pathognomonic vasoconstriction (for, it is seen in no other condition), marks progress in our knowledge of the disease, since it puts a definite therapeutic problem before us for further research to solve, if it be solvable.

Having considered some of the facts relating to incipient and chronic epilepsy in a rather discursive manner, I shall, for emphasis, briefly summarize them and then proceed to the subject of treatment.

Idiopathic epilepsy is a progressive disease involving always the vegetative nervous system. Frequently, there is a definite incipient stage, lasting from six months to two years, manifested by the *petit-mal* attacks as described in the foregoing. As the disease progresses (at times at the beginning), the cortex is involved, it being hyperirritable, unstable, and it manifests this condition by *grand-mal* attacks—convulsions. Chronicity of this condition brings morphological changes in the cortex—cortical gliosis. Many of these chronic cases progress further into dementia, and authorities have stated that this is hastened by the severity and frequency of the convulsive attacks.

The Treatment of Epilepsy

The defective metabolism of epilepsy and the relation to it of the various glands of internal secretion have yet to be worked out. Only that relating to calcium deficiency, which has been described, appears to me to be on a scientific basis that is confirmed by a consid-

erable clinical experience. I offer it as a scientific contribution to the treatment of epilepsy with convulsions. The dosage is given further on.

Treatment for incipient epilepsy.—What follows in quotation marks is from a paper on incipient epilepsy, its diagnosis and treatment, that was read at the Boston meeting of the American Medical Association, before the neurological section, in June, 1921. The paper presented to fellow practitioners is the result of several years' research in this special field of investigation. It was reprinted in the (N. Y.) *Medical Record* for March 11, 1922.

"The finding of an overirritability, a true hypertonia of sympathetic fibers in incipient epilepsy raised the question, could this hypertonia be overcome by drug action and if so with what result? The drug required to overcome a hyperirritability of sympathetic fibers should evidently be a sympathetic paralyrant. Ergotoxin is described as such in the literature. A small quantity of ergotoxin phosphate was obtained, a weak solution of it in water was prepared and a few drops of this was injected into the writer's forearm. The vasoconstriction reflexes produced in the neighborhood of the site of the injection came slower than they did before the injection was made. A control injection of plain water was negative. There was this much ground, therefore, for inferring that ergotoxin phosphate is a sympathetic paralyrant in man. About this time, the writer came across the notice of a drug reported by a Dr. R. E. Waterhouse as curative in some cases of epilepsy, viz., *Enanthe crocata*. With it in place of the ergotoxin phosphate, the previous personal experiment was repeated and the vasoconstriction reflexes were slowed in a similar manner; hence the inference that *Enanthe crocata* is a sympathetic paralyrant. The preparation available was a tincture, and the writer, having reason to consider alcohol as an irritant to sympathetic fibers, inquired of Prof. John Uri Lloyd if an active preparation of the drug could be made free of alcohol. Professor Lloyd kindly supplied a colloidal preparation of *enanthe* without alcohol, and it has been used with satisfactory results. The therapeutic dosage of this preparation carefully worked out is as follows: The writer has prescribed as high a dosage as five minims four times a day (after meals and at bedtime) in cases in which a demonstrable sympathetic hypertonia was present in children ten years of age, but he advises a very cautious approach to such dosage. A safe method to start its use is to mix 10 drops of colloidal *enanthe* with 8 ounces of water, and to give 1 teaspoonful of the mixture after meals and at bedtime. This dosage can be increased by doubling the quantity of the *enanthe* each time the bottle is refilled, every twelve days, until the mixture consists approximately of 2 drams of colloidal *enanthe* in 8 ounces of water. (The use of distilled water is advised.) If the medicine causes any untoward symptom, as debility, diminish the dose or omit the medicine."

I will add that the mixture of colloidal renanth and water should be kept near ice in order to lessen its tendency to "sour"; this tendency is lessened if it be dispensed in four-ounce mixtures, in place of the eight ounce, as it is consumed in half the time.

Always begin with a small dosage, 10 drops in 8 ounces of water. One teaspoonful of this mixture to be given after meals and at bedtime. Often, after a few months' treatment, the symptoms of faintings, dizzy attacks, sudden pallors, etc., cease. But it is important to keep up the medication faithfully for a year, at least.

In cases where the symptoms of *petit mal* have already lasted a year, and in those cases in which the disease apparently begins with convulsions, (in children five years old and upwards), in conjunction with the colloidal renanth mixture, prescribe calcium lactate with parathyroid tablets in the manner to be described. Remember that convulsions in epilepsy indicate cortical irritability due to calcium deficiency. Therefore, prescribe one parathyroid (Armour and Co.'s) tablet, followed by a glass of milk in which 10 grains of calcium lactate are dissolved, and have this taken four times a day. This can be taken indefinitely, and should be regarded more in the light of a pabulum for irritable nerve tissue, than as medication.

In cases with persistent convulsions, indicating great cortical irritability, a medical sedative is needed in addition to the calcium lactate plus parathyroid combination. I most frequently prescribe potassium bromide, in dosage sufficient to overcome the pharyngeal reflex.

In chronic cases in children, six years and

upwards, persistent treatment is of importance, remembering that the child's period of growth may aid our efforts to bring diseased nerve tissue back to normalcy. Diet is of importance; for, growing children must be nourished. Plenty of milk, whole-wheat bread (with butter), one egg a day, meat once a week, plenty of greens, potatoes, fruit, and limitation of sweets.

Epilepsy a Sympatheticotonia

All that I have written pertains to the treatment of idiopathic epilepsy, a disease entity, commencing with a hypertonia of sympathetic fibers and essentially, at that period, a disease of the vegetative nervous system. It progresses with involvement of the sensory-motor system, and many cases progress further into dementia. This disease can originate in a sound nervous system, by the action of a severe fright (see case report in *Endocrinology*, April-June, 1920) causing a hypertonia of sympathetic fibers; and most authorities dwell upon the influence of the emotions, fright, grief, worry as provocative of the disease. Almost always, in the history of the case, one or more of the infectious diseases have been suffered (measles, scarlet fever, whooping cough, mumps, influenza, encephalitis lethargica) and I strongly suspect that the toxins of these diseases attack the vegetative nerve tissues, producing the sympathetic hypertonia that is the essential feature of the disease, and causing the various symptoms, according to the particular strands of nerve tissue involved. Heredity plays a very minor part in the etiology of the disease. Alcoholism in either parent, especially when acute at time of conception, is causative of epilepsy in the off-spring.

A Case of Bichloride of Mercury Poisoning

(From a Physician's Diary)

By B. W. ABRAMSON, M.D., Asheville, North Carolina

MERCURIC-BICHLORIDE poisoning is not a novelty, nowadays. It has reached almost epidemic proportions in this and other countries; especially among women, who use it for the purpose either of preventing conception or inducing abortion. In Buenos Aires, it went so far that one author¹ reports 39 cases of poisoning within a period of five years in his own practice and who also makes a plea for a

prophylactic campaign for the enlightenment of the public in regard to the danger from this drug and the agonies it causes when taken with suicidal intention.

The case that I wish to report is of interest, because the patient belonged to a class of people among whom suicide is very rare and self-induced abortion by means of drugs is still more rare. The woman was a Russian-German immigrant, the wife of an illiterate farmer, and whom you would hardly suspect of being in sympathy with the birth-control movement.

¹Pignetto, *Semana Medica*, Vol. 26, No. 50, 1919, p. 741.

There is another peculiar psychologic aspect in this case which will be easily revealed by the history.

History of the Case

On May 13, 1921, 1 a.m., while in private practice, in Anamoose, N.D., I was called on the 'phone and asked to come to my office immediately. I complied with the request and found an old patient of mine, T. H., in apparent agony. On questioning and examining the patient, I found that he suffered from a severely burned and excoriated penis, due to some protoplasmic irritant. Previous venereal disease was denied and even a superficial examination revealed the fact that it was a recent affair. His story ran as follows: "About a week ago, I had a quarrel with my wife on account of her being frigid to me and refusing to cohabit with me. In justification of her attitude, she would say that she is afraid to be pregnant again, as she has a premonition that she will die during delivery." They were married seven years and had four healthy children.

"This evening, she was unusually friendly and actually invited me to cohabit with her, being first to make the advances. The result of the vileness of this woman, Mr. Doctor, you see, with your own eyes," he added pathetically.

Administering first aid in a rather hurried fashion, I immediately proceeded to his home and questioned the woman. She admitted the following: She was told by a neighboring woman that there are such tablets able to prevent conception and, getting possession of such tablets, she inserted two of them into the vagina just before coitus took place. The tablets were mercuric chloride tablets of 7.3 grain size. She complained of violent burning in the vagina and vulva.

Examination, Course and Treatment

The patient had been healthy all her thirty years of life. She belonged to the peasant class and her sexual life was normal in all respects. She had no idea of the danger of the drug and denied her husband's accusation that she took the poison for the purpose of "crippling" him. As stated before, she was in extreme pain; the vulva was already swollen and the vaginal mucosa was blanched, puckered up in folds and, where the tablets were lodged, denudation of the mucosa took place. The general condition was as yet but little affected. The pulse was rather fast due to fear and excitement. She was slightly nauseated and complained of being chilly.

The following preliminary treatment was instituted. A vaginal douche, consisting of two

quarts of milk and the whites of six eggs was given at once and followed by injection of a pint of Russian Petroleum. A similar injection of milk and eggs followed by petroleum was given per rectum. Milk and eggs were also given by mouth, in order to saturate the system with as much albumen as possible. External heat was applied over the abdomen which was slightly distended and painful. A hypodermic of morphine and atropine was administered to insure sleep and alleviation of pain.

The next morning's examination revealed the following: Vulva edematous and swollen, the vaginal mucosa beginning to slough away; a yellowish green exudate and a seropurulent discharge were oozing from the vaginal walls; patient's lips and entire buccal orifice were dry and parched; she complained of severe headaches, pain in lumbar region and extreme thirst; urination was scanty and painful as the urine dribbled over the inflamed and edematous labia.

Treatment for the day was instituted as follows: A vaginal douche of calcium-sulphate solution was given in dose of 1 grain to 1 ounce of water, followed again by injection of liquid petroleum; a tampon of gauze, permeated with ichthyol, was inserted into the vagina to prevent atresia. Internal medication consisted of fresh calcium-sulphide solution given by mouth in 5-grain doses, every three hours; diuretics and alkalies in the form of acetates and citrates 1 Gm. every four hours; egg nogs and cereals as nourishment (salt was excluded from the diet), a glass of orangeade or lemonade every waking hour; hot baths every four hours, day and night; high colonic irrigations morning and night, mouth-wash every three hours with liquor alkalinus antisepticus.

This régime was adhered to for twelve days, at the end of which I felt confident that the patient would recover.

The patient was an invalid for six weeks. The most prominent symptoms were those of traumatic nephritis. When I examined the urine on the second day, two minutes' heating over the alcoholic lamp coagulated it completely. Hyaline casts, granular casts, red blood cells, white blood cells, and epithelial cells were numerous. The urea nitrogen contents was increased ten times. Normally, the urea nitrogen output is 12 to 23 Gms; in her case, it was as high as 140. The fortunate thing about this case was that at no time was there a complete anuria. If voluntary urination did not take place, catheterization was always successful in obtaining urine.

The patient completely recovered and, what is most interesting is the following fact; about a month later, after the poison was taken, she complained to me that her menstrual flow did not appear. I ascribed the suppression to the fact that she was so sick during this month. But, I was mistaken. Examining her again two months later, I was able to make a diagnosis of pregnancy which, as far as I know, she carried through successfully. Her purpose was, after all, defeated.

Conclusions

A case of bichloride of mercury poisoning by the vaginal route is reported. The successful issue of this case proves that the new lines of treatment, especially the administration of calcium sulphide as an antidote, is effective even

in such cases which were formerly considered hopeless. The principal concern of the physician in such cases should be: (1) to reduce the toxicity of the mercury; (2) to hasten its elimination; (3) to combat acidosis. The lines of treatment as carried out in the reported case aimed at and met all the requirements. The severe intoxication did not interrupt the course of pregnancy, of which the patient denies any knowledge, claiming that the mercury was taken with the only intention of preventing conception.

The husband suffered only from the local lesion. No systemic effects were noticed. The urine was always free from albumin and casts. He was under my observation for a week, getting the same internal medication as that given to his wife, as a prophylactic measure.

Organotherapy and Its Relation to the Specialist*

By MAXIMILIAN KERN, M. D., Chicago, Illinois

ENDOCRINOLOGY has been covered from so many different angles at various times, that it would seem of greater importance to the general practitioner to give his time to a general review of the subject. For this reason, I will endeavor to draw some conclusions tending to show the frequent necessity of co-operation between the specialist (particularly the ophthalmologist) and the internist. In citing a few cases, I hope to illustrate not only wherein the internist could be of help to the specialist but, also, the possibilities opened to medicine through the study of this subject.

It is interesting to note that, since the advent of modern organotherapy, we of the so-called regular school of medicine are getting ourselves familiarized with such phrases as the thyroid patient, or the pituitary headache and similar expressions.

Although the youngest child of modern medical thought, endocrinology is really an old medical idea in its last intrenchment. The vague theories of ancient modern concepts have suffered complete overthrow by modern scientific reasoning which does not admit of theories unproved by fact or experiment. Nevertheless, in organotherapy, we see, in a limited sense, the final realization of the ages-old dream of substitution therapy.

For centuries, endeavors along these lines dominated the healer's art. The sufferer from dyspnea was fed up on lung substance of the deer; the anemic and pallid patient was sent to the slaughter house to imbibe in deep draughts the blood of young steers; the waning virility and decrepitude of old age was sought to be reinforced by the administration of ram's testicles by the way of a specific diet.

Needless to say, all such attempts at organotherapy were doomed to failure, owing to the lack of recognition of the fundamental principles. In fact, medicine ultimately considered itself arrived at an *impasse* in this subject and relegated it entirely to the realm of fiction. Even today, the wave of destructive criticism in this line has not been entirely overcome.

Then, all at once, in our time, a new perspective of organotherapy has dawned upon us, which opened wide the portals of progressive achievement in this direction. Actual clinical experience has given us definite, although very limited, knowledge of the physiology of organs of internal secretion. Time was, and not so far distant, when an organ of such tremendous physiological potentialities as the thyroid was looked upon as an almost negligible appendix of the human anatomy, on account of the fact that it evidently has no excretory duct. However, when clinical data was foregathered and correlated, dealing with the various states of

*Read by invitation at the June, 1922, joint meeting of the A. I. H. and the O. O. and L. Society, held in Chicago, Illinois.

lack of thyroid function, of hyperactivity, etc., the true function of the thyroid became recognized such as we know it today, and it was not long thereafter that the first halting steps in modern organotherapy were taken.

It would not further my mission here to review that miracle in modern medicine which the administration of thyroid extract to a myxedematous child brings forth. This one great advance proved for all time the truth of organo-therapeutic thought. Incidentally, the entire domain of endocrinology was reopened to research.

Thyroid Faults

The phenomena of puberty, the appearance of secondary sex characteristics in all animals demonstrate clearly that the procreative glands also possess an internal secretion entering the blood stream. Thus, a hitherto unheard-of perspective in medicine revealed itself to us. This new understanding introduced in medicine will henceforth have to be reckoned with and taken into consideration in all our concepts of pathology and, also, as we earnestly hope, in our therapeutic efforts.

The interpretation of the function of the thyroid marked the inception of modern endocrinology and the thyroid still dominates the field. This knowledge was obtained largely through the study of results of the congenital absence (cretinism) of the gland, as well as its entire removal (cachexia strumipriva). We became acquainted with a syndrome known as myxedema, or hypothyroidism. Although a great deal has already been accomplished in the treatment of cretinism, we have really just embarked on a field of hopefulness in the treatment of this condition through the administration of thyroxin, or thyroid extract.

Opinion still differs a great deal as to the proper method of treatment in thyroid enlargements, and I believe that we can line up as many medical dignitaries who favor surgery for a cure as we could find on the medical side. Thyroid also succeeded in occupying most of the attention of the students of endocrinology on account of the definite knowledge gained in the study of basal metabolism.

The Pituitary

The second gland of importance, the pituitary, which concerns itself primarily with the phenomena of growth and sex development, is now receiving more attention than any other organ, in spite of the fact that its relation to metabolism is not definitely known.

We are now getting suspicious of the pituitary gland in such diseases as metrorrhagia, obesity, epilepsy, somnolence, polyuria, gly-

cosuria and amenorrhea. Reed and Ohlmstead report a case of diabetes insipidus treated effectively with an extract of the posterior pituitary lobe; and Barkman (*Acta Medica, Scand.*, Mar., 1922) calls attention to the fact that it is now advisable to examine every case of epidemic encephalitis for pituitary insufficiency. He cites a case of a healthy man of 35 years of age, who gained 35 kg. in weight during two years after the attack, the deposits of fat accumulating in such manner that the general aspect and expression of the patient was that of a female, even to the extent of shrunken genitals, scanty growth of beard, with a somewhat impaired vision and sluggish reaction to light. We now recognize the patient who complains of migraine of hemispheric type, accompanied by visual disturbances, albuminuria and high blood-pressure as a patient with pituitary disturbance. Likewise do we relegate the patient with Frölich's syndrome, acromegaly, and most other diseases of growth to the pituitary class.

Spaulding (in the *American Journal of Psychiatry*), speaking on the importance of endocrine therapy in combination with mental analysis treatment, cites five cases in which endocrine therapy, together with mental analysis, was employed effectively: A case of psychopathic personality with episodic attacks; a case of psychoneurosis showing antisocial tendencies; a case showing emotional imbalance in a girl who had utilized physical conditions in which there was a glandular element to protect herself against unpleasant social situations.

The Gonads

Although least understood, the gonads are the most abused organs in a therapeutic sense. They dominate, in a great measure, the emotions, personality, crimes, etc. According to Engelbach and Tierney, of St. Louis, the gonads rather than any other organ busy themselves with excessive growth of long bones.

It is not surprising to find that this particular organ should play such an important role in the struggling career of endocrinology, when we stop to think of the various attempts that have been made since the war to use them either by the administration of the extracts or tampering with the gland to rejuvenate people. Indeed, for a time this particular branch of endocrinology became so promising that the laity were led to believe that, pretty soon, we will be able to revive the dead by the administration of testicular extracts.

Time is too limited, and I do not believe it is necessary, to go any further into the general description of the function of the various organs of internal secretion. It is probably

timely now to fear that endocrinology will very soon reach the stage when it will be considered a fashionable cause for every disease known and a promising cure for all ailments. It is against this misinterpretation that we must guard. If only for this reason alone, we must feel highly encouraged to find that men in their respective specialties are giving time and thought to the subject, even if a great deal of it is still in the theorizing stage.

Of Interest to Ophthalmologists

In a recent article by Friedenberg (*New York Med. Jour.*), an attempt is made to prove the relationship of renal disease and diabetes to retinitis and cataract. In view of the role that the pancreas is playing in diabetes, it seems very suggestive that a glandular disturbance may be an influencing factor in the above-mentioned diseases of the eye. The fact that glaucoma appears more frequently during the climacteric, at a time when there is a general retarding in the secretions of the gonads and a hypersecretion of the thyroid (relative hyperthyroidism), as well as the fact that glaucomatous attacks have marked exacerbations after emotional experiences, such as fright, worry, anger and exhaustion, might suggest dysfunction of the gonads. As a matter of fact, the appearance of visual disturbances during old age in a relatively physiological sense, simultaneously with a decline in endocrine function, would also point towards a vicious influence of the gonads. The typical pituitary headache in which error of refraction is entirely out of proportion with the ocular discomfort found, as well as also the well-known eye condition found in Grave's disease, are advanced as possibilities of endocrine disturbance.

Imre, of Budapest, devotes a great deal of time to proving that a disturbance in the balance of the endocrine system has a direct influence on the intraocular tension, and suggests that there is a pluriglandular disturbance of the physiology of thymus, thyroid, pituitary and the gonads. He cites a rather unusual case which came under his observation in the eye clinic at Pressburg. The patient was a pregnant woman with signs of osteomalacia. Her eye balls lost the original form; the cornea of both eyes was wrinkled and her intraocular tension, (taken by a tonometer) was less than 5 mm. Hg. (Normal intraocular tension is between 15 and 26 mm. Hg.; but when the heart stops beating, it sinks to 8 mm. Hg.). This observation led to a systematic examination of the eye tension in other pregnant women and he finds that, among fifty patients, forty-

two had decidedly subnormal tension; two had normal tension; and six had high tension. All those that had hypotension showed a general appearance of hyperthyroidism which, according to Erdheim and Stumme, is more or less pronounced during pregnancy. One of the patients examined had an intraocular tension (taken by a tonometer) of 11 mm. Hg. in the right, and 12 mm. Hg. in the left; showed atrophy of the optic nerves, bitemporal hemianopia, amenorrhea, and a large sella turcica.

Hippell found that patients with glaucoma gave a positive Abderhalden reaction with thyroid and thymus, without showing any other signs of glandular tumors. Thus it would be reasonable to conclude that, if the above theories prove to be scientifically correct, the diagnostician will not only be able to aid the eye man a great deal in the treatment of some of his cases where involvement of the endocrine system is present, but examination of the eye will aid us in making many diagnoses which, I am sorry to say, have thus far had to be relegated into the category of neurasthenia, declining health, etc.

The Nose and Throat Affections

The nose and throat field has not succeeded in gaining complete immunity from the searching light of the endocrinologist. We find that, in diseases of the nose and throat, where there are several more or less clinical entities with obscure etiology, where the pathological changes are not of an inflammatory nature or due to any definite bacterial invasion, the etiology carries us into the direction of endocrine study.

One of the most perplexing diseases—asthma—has been benefited effectively by the administration of adrenalin and extract of the posterior lobe of the pituitary, (Selfridge of San Francisco, in *Laryngoscope*). This he thinks very suggestive of some endocrine disturbance. Of course, I speak only of cases of asthma where there is no definite nasal pathology found, and I realize that there are many cases of asthma where the internist, after a very careful examination, can find no nasal pathology and the skilled nose and throat man will nevertheless succeed in finding an infected ethmoid. By clearing it up and instituting proper methods of elimination, he will then cure the asthma. (Haseltine, in the *Journal of the O. O. and L.*)

Some argument may advance in cases of hay-fever, where there is no definite sensitiveness to pollen, foods, animal hairs, or bacteria. Quite recently, Novak,¹ of Chicago, and Selfridge, of San Francisco, have independently worked on

the question of metabolism in asthma and hay-fever. Both find a lowered basal metabolism in those cases. Since we do not know of anything definite that interferes with the basal metabolism outside of some glands in the endocrine system, it seems reasonable to think that hayfever and asthma have some connection with the internal secretions. Novak² finds in vasomotor rhinitis (hyperplastic ethmoiditis manifested clinically by periodical paroxysms of sneezing followed by profuse watery discharge, frequently associated with ocular, pharyngeal, and bronchial symptoms) a lowered metabolic rate which is increased at the administration of thyroid extract.

In Ear Troubles

Weider (*Laryngoscope*) claims that otosclerosis has been attributed to subthyroid conditions because of the improper balance of calcium metabolism found in this condition. Some attribute it to a distinctly pituitary disturbance. Dengar believes that otosclerosis is due to a dysfunction of the hypophysis, basing his belief upon the fact that this condition is very much aggravated during pregnancy, when there is an increase in the size of the hypophysis.

That the gonads play some role in diseases of the nose and throat, is suggested through the presence of hypertrophied turbinates in patients who give a history of repeated and long-continued sexual excitement, notably in prostitutes.

My own observations and experiences have confirmed in a great measure the above-stated facts and should further emphasize and illustrate clearly the advisability of cooperation

between the ophthalmologist and the internist by the following report:

About five months ago, a patient was sent to me by an ophthalmologist who was consulted with reference to some ocular disturbance and strabismus. The patient was a boy aged six, of slender, underdeveloped stature; muscular development poor, genitalia very small, mentality defective. Laboratory findings: Urine contained some albumin. The blood picture was normal with the exception of a low hemoglobin. X-ray examination showed very small sella turcica. Limited expansion of chest; impure heart tones. The patient's mother informed me that the child had been taking thyroid prescribed by a doctor, but showed no improvement. On the contrary, he was very restless, irritable, and suffered from insomnia. After various tests as to the tolerance of glandular extracts, I prescribed anterior pituitary with gonads and, intermittently, thymus. After three months' treatment, the boy gained 15 lbs. in weight; the mentality improved materially, the heart action became normal; there was no albumin in the urine and, to put it in the words of the mother, "the boy has grown two years mentally and physically within the space of one month."

In conclusion, permit me to say that this paper is not an attempt to cover the field of endocrinology from every viewpoint. It is merely intended to give a brief sketch of the possibilities of endocrinology as we understand it today, and it is hoped that, within its limited scope, it has succeeded in doing so.

¹Wisconsin Medical Journal, March, 1921.

²Wisconsin Medical Journal, March, 1921.

My Twenty Favorite Drugs—V.

Nerve Sedatives

By WM. RITTENHOUSE, M. D., Chicago, Illinois

OF the ills that afflict humankind, and especially the female half of it, one of the most common is the condition we call "nervousness". The term is a vague one, but the suffering produced by it is by no means vague; it is, on the contrary, very real. It may be a symptom of some condition that requires radical treatment or it may be idiopathic, which may mean that the cause cannot be found. It may be caused by disease, dissipation, errors in diet, overwork, and other things. Of course, where the cause can be found, it should be removed. However, if this is not possible, it

is proper to treat the nervous condition itself for relief.

Nervousness is ridiculed and belittled by those who have never experienced it. If there is anything that can reconcile me to the suffering that I have endured during the past eight years from my spinal lesion, it is the thought that I have learned what "nervousness" means. Indeed, I shall never again make the mistake of regarding it lightly when I meet it in others. Some laugh at it as "hysteria". That word is too often a smoke screen for ignorance or indolence. The doctor, failing to diagnose the

cause of the trouble, dismisses the matter with a smile and a remark about "hysterical people". Yet, the science of medicine exists for the purpose of relieving suffering, and *all* suffering is worthy of the physician's attention whether great or little, whether dangerous to life or not. To give comfort where discomfort prevailed, is to win the patient's gratitude. Besides, nervousness may cause actual harm by unfitting him for his usual duties.

Those doctors, who are always looking for something to operate on, are inclined to lose interest in a case that is "purely nervous", but this is poor policy even from a business standpoint.

A well known instance is the discomfort that women endure in greater or less degree while passing through the menopause. Usually there is no organic lesion and, so, the patient is left to endure two or three years of discomfort that might be avoided by therapeutic means.

For the nervous disorders of the climacteric, I have for many years used this simple formula:

℞ Ext. Valerian

" Sumbul

Asafetida of each, I gr.

I have the mass made into a compressed tablet, chocolate- or sugar-coated. It is listed by most makers of tablets under the name of "Baer's Sedative". That it is effective, is proven by the fact that patients come back for more and

send their friends. I have found it a good builder of business.

It is good business policy to dispense rather than prescribe any remedy that gives such general satisfaction. If the doctor writes prescriptions for it, he is almost certain to be deprived of the reward of his skill, to which he is justly entitled. Patients will have the prescription refilled again and again for themselves and their friends, because it is utterly useless to mark a prescription "Do not refill". No attention is paid to it by most druggists. I do not feel that it is mercenary for a doctor to take this attitude. If he has discovered or thought out a formula that gives especially good results, he has a right to protect himself against those who would deprive him of his reward.

While the greatest value of this formula lies in relieving the neuroses of the menopause, I find that it is useful as a sedative in many other conditions and in both sexes. It has none of the unpleasant aftereffects of the bromides or of the coaltar products.

I do not understand why the value of this combination is not recognized more generally. Some of our recent graduates have never heard of it. The professors of therapeutics must be inclined to "nihilism". No doubt, the value of drugs was formerly overestimated; but, at the present time, we are in danger of going too far in the other direction. The only test of any value consists in the results we obtain.

2920 Warren Ave.

The Problem of the Opium-Addict

By H. E. GOETZ, M. D., Knoxville, Tennessee

THE Harrison Antinarcotic Law may well be termed the Dr. Jekyll and Mr. Hyde of Federal statutes, in so far as it is supposed to control the employment of narcotic drugs for other than legitimate medicinal purposes and to bring about a reduction in the number of what is termed drug-addicts. It has taken away dispensing privileges from the medical profession and has placed them in the hands of illegitimate drug venders. It is not alone my purpose to criticize this statute, but to point out why it has failed and why the addict fails to obtain permanent relief from his malady under the operation of this law.

During twelve years of active work with these patients, it has been my fortune to ob-

serve that, surely, the harvest is plenty and the laborers are few.

It seems that there yet remain some in the ranks of the medical profession who deny that drug-addiction is a disease and who consider it a vicious habit only, placing the addict in the class of the moral derelict. His demand for the drug is believed to be but a desire to satisfy a perverted craving, and it is asserted that he might purge himself of this craving as easily as one would of the use of tobacco. This erroneous conception seemingly arises from the fact that one does not readily appreciate the various pathological aspects of the problem.

What is disease? According to Lippincott's "Dictionary of Medicine," it is "Any depart-

ure from the state of health, presenting well-marked symptoms and having a definite character." That being so, it must be asked whether opiumism, or drug-addiction, presents well-marked symptoms of a definite character.

Consider a patient, an addict, not in balance; that is to say, deprived of his regular allowance of opium. He appears before us with rapid heart action, thready pulse, irregular respiration, yawning, sneezing, complaining of great weakness, pain in limbs, chilliness and goose flesh, pallor, restlessness, diarrhea, vomiting, loss of appetite, widely dilated pupils, excessive lacrimation, and insomnia.

The same patient, while in drug balance, presents contracted pupils, heart action usually accelerated ten beats, respiration normal, taking food at irregular hours and scantily, constipated to a degree that makes necessary strong purgatives daily, urine scanty and high-colored, with high specific gravity. The blood pressure is commonly low; 80 to 110 systolic, unless some complicating factor raises it higher. Emaciation is usual; yet, some patients appear to be well nourished. The liver is contracted; there is lack of energy and strength; also loss of will power. Some patients complain of impotence; nearly all state loss of libido; cessation of the menstrual flow is observed in more than 80 percent of the female addicts.

Heredity a Factor

I have heretofore called attention to a family who came under my observation and in which there was a direct transmission of the disease from mother to son, in utero, and in turn by the son's wife, she being an addict also. In the children born in this second generation, I witnessed the phenomena that are usually present in adults before the infants were a week old. Now, if my position (that opiumism is a disease with a well marked and constantly-appearing symptomatology and well defined pathology) is not well taken, then how can we explain the crying of an infant, excessive lacrimation, sneezing, restlessness, refusal to nurse, and the pallor, all of which promptly disappear when a dose of morphine is administered, to reappear in a few hours and again disappear when more morphine is given? These infants were but a few days old and certainly too young to reason. How can we explain the tolerance to $\frac{1}{2}$ -gr. doses of morphine in an infant but a few hours old?

Again, my experiments with dogs and chickens prove conclusively that there can be no mistake in my premise.

It would seem therefore, that debate is not necessary, and that opiumism surely is a dis-

ease within the meaning of the term.

Then the question arises: Why should it be expected that the addict could rid himself of the disease without proper medical attention? Surely, this much is not expected of any other class of sick persons. Nor is any other sick person thrown in jail, to receive "cold turkey" instead of medical attention.

Opium Addiction a Psychopathy

Let us consider seriously why and how, the disease is incurred. The seed of the trouble is sown in the preceding generations; that is, the psychopath is born, the nervous and mentally unfit goes forth to battle without proper armour. An accident occurs resulting in bodily injury, or a surgical operation is necessary, or some prolonged illness, perhaps painful in character, all of which make necessary the use of narcotics to sustain or save life. The drunkard finds a relief more swiftly and certainly, if narcotics are employed following an acute debauch. He resorts to this remedy in the future without the aid of his physician, via the "boot-legger" route. How frequently have we observed two patients suffering the same type of illness receiving narcotics. To one it brought only passing relief, and to the other joy. The first represented the normal type, and the latter obviously the psychopath.

There exists an underground world of addicts, no doubt, who actually take up the use of narcotics and encourage others to do so, from a mere desire to get the "kick" which has been lauded to them by vendors of drug. However, in my opinion, this class represents but a small minority.

It is apparent that any drug, or agent, which will produce brain stimulation has a seductive action on the human economy. Opium has a direct action on these cells of the cerebrum that preside over intellectual action. Wood says: "Some of the world's most famous writings have been produced under its influence." Further, it appears to stimulate those tissues that have to do with the imagination. The higher up the scale of intellect we reach, the less amount of drug is necessary to give effect, while the low type (spinal type) will take great quantities without marked effect on the intellect.

This stimulation disappears in many after the disease is well established, giving way to the sluggish brain action seen in overstimulation, and a fear not unlike that found in anxiety neurosis.

We have observed some patients, using the small quantity of $\frac{1}{8}$ grain of morphine twice

daily, as helpless to rid themselves of its influence as one taking many times that much.

Mrs. U., the wife of a West Virginia coal miner, actually consumed by mouth three 54-grain doses a day, and an attempt at reduction produced the usual symptoms observed in withdrawal.

Here we have both types. The one getting the necessary action to make life livable on $\frac{1}{4}$ gr. daily, while the other actually used 162 grains in the same period, which is a ratio of 648 to 1.

The seductive action is most marked in the psychopath; for, we have noted asthmatics taking relatively large doses of morphine daily for a period of a week or more and, when the attack abates, leave off the narcotic, until the attack reappears, sometimes after a period of weeks, to resume the use, and repeat the procedure for years, yet they never present the symptoms of addiction. On the other hand, a few doses administered under like circumstances in other persons awaken within the brain a demand which, if encouraged in the least, leads to disaster.

Addicts Not All Criminals

Why are addicts usually termed criminals? We have seen the phenomena that appear when the daily dose of an accustomed narcotic is lessened or cut off. All drug addicts are subject to fear, an awful fear, of something worse than death overtaking them when once their panacea for all ills is denied them or about to be denied them.

Up to the time the patient begins to find it difficult to obtain the usual supply, he or she is, generally speaking, normal morally.

To lie is a wrong to him, to steal a disgrace unthought of, to resort to any dishonesty a crime. But, once the "shoe pinches," he will lie and steal to obtain his drug which is his life.

I have never known one to commit murder, though it is generally believed that they do; never have I known them to even strike another nor to commit rape, even in the criminal class. It is the general opinion that there is no crime too low for their hands. Self preservation prompts them to steal and lie. Society is responsible for their pitiable plight. It is asserted to be a disgrace to be addicted to drugs. That is the first mistake made by society. If society is in the right, then it is a disgrace to be born unfit, nervously, to face the problems of life. It is a disgrace, even a crime, for any man or woman to, knowingly, take up the use of narcotics for their intoxication affect; but

(as I have said), in my opinion, only a small percent of the whole addict population acquire the disease that way.

Owing to this "disgrace," the poor unfit is forced to secrecy. He lies to hide this disgrace. Is he to blame for shielding himself?

In my daily association with these people, I have found them as honorable as the average in their equal rank socially.

However, everyone is acquainted with the criminal addicts; these are the ones best known to the public. There is a criminal element in the ranks of the "addict" that would be criminals in the church or in the Masonic fraternity or elsewhere, and the courts of justice should make searching investigations into the indictments brought against physicians or others for alleged violations of the narcotic-drug act when the charges are based on the testimony of this element. Give any one of them into my hands for forty-eight hours, and I can make him swear in any court, with a good face, too, that he had just witnessed the battleship Maine riding at anchor at the corner of State and Adams, with Washington at the helm, "Bob" Evans lashed in the rigging and Woodrow Wilson in the hold stoking. A promise of a continuation of drug or a threat to discontinue it is sufficient. Many physicians in the United States have been dealt with on just such unreliable evidence.

From All Walks of Life

I have found many and various people in the ranks of addicts. The medical profession contributes a large percent, next the legal profession, and a large percent of the whole comes from the ministry. These people freely admit that, if the emergency had arisen, they would have lied to shield themselves or to procure drugs. It would seem that there is no question that the demand for the drug stands first in intensity; hunger for food or thirst for water taking second and third rank.

I offer as proof of this the following: A charitable society brought to my attention a widow with three children under ten years of age, all dependent on a boy 14 years old for their support. She would not only sell, the food from her own mouth but would rob her starving children of the scanty supply provided by the older boy, in order to obtain her dose of morphine.

The Remedy

Now that we have fixed in our minds the status, so to speak, of the addict, and have placed him in the true light, the question is paramount: What shall we do to relieve the

situation and to cure the unfortunate addict? On various occasions, I have tried to point out that the mere stopping of the drug does not constitute a cure, even though it may be continued for a period of months. It must be remembered that there yet exists the underlying pathology of the nervous system and the awakened demand for a brain stimulant. This must be reckoned with.

In the case of an addict coming under my care a few months ago, with the following history, this feature is aptly illustrated.

C. D., age 47, syphilitic, with alcoholic amblyopia, addicted for twenty-four years.

"I was committed to the Federal prison at Atlanta on the —day of 1918, for selling narcotics. I had pleaded guilty to the charge, at the suggestion of the members of my family, and was given a sentence of two and a half years, by a well-meaning and kind-hearted judge who stated to me, as he sentenced me, that he was giving me a long sentence hoping that I would be cured while in prison. He knew that I had served one previous term of twelve months in the same prison, a few years back. When I was granted my liberty, a little over two years afterwards, I had been "off drug" for two years and more. I shall never forget the day I walked out of the prison. There had been some changes made at the gate since my incarceration and, in my blindness, I staggered down the steps and breathed the air of freedom once more.

But, my first thought was, where can I obtain morphine? Strange, is it not? The old craving was there and, with the \$5.00 the Government had given me, I made off for the first drug store I could think of. After a time, I got track of a peddler, obtained a few cubes of the sulphate; and, with a hypo needle fastened to an eye dropper, I managed to get a dose under my hide. I felt that freedom indeed is a precious thing.

I took the next train home, 180 miles away, where I soon found the usual source of supply awaiting me, and you know the rest of the story."

It has been several months since we discharged this patient. This time, no doubt, the results have been of a permanent nature.

Prison Cures Useless

I have had the privilege of questioning most of the patients confined from this vicinity as to the results of their stay in prison. Save one, all report that they resorted to drugs immediately after liberation. It is apparent that the gradual reduction of the daily dose is non-curative as well as nonsense. Well might we argue that, if these patients could be thus cured, one afflicted with tuberculosis of the pulmonary type could also be cured by daily reducing the number of coughs. I have yet to see one single case where a permanent cure of addiction has been effected by reducing dosage.

The addict most frequently selects this method, feeling that he will not be "cut off" and allowed to "kick it out." But, he seldom reached the final reduction until about the day he is to be discharged, and then, of course, he finds excuse enough for his return to the drug.

Yet, according to Treasury Decision No. 2200, we are allowed to proceed with these cases only by "gradually reducing doses." It is evident that the Commissioner was not well advised when this ruling was made. Not only is the method a failure, but it admits of no progress whatever. The physician who would investigate, who would like to develop a rational treatment, is precluded from doing so for fear of transgressing this ruling, which would mean the loss of his good name and liberty. No doubt, this ruling came about as the result of ignorance, and it should be brought to the attention of the Commissioner of Internal Revenue who surely would correct it. At the time it was put in effect, Commissioner Osborn was the active head of the Keely Institute at Greensboro, N. C., and his institution advertised "Gradual Reduction and Hyoscine Knock-out" as the methods of treatment used there. He was empowered by the statute to use his judgment in putting the law into effect and, doubtless, he believed that "gradual reduction" was the proper thing since his own institution used it and approved it.

It is monstrous that Congress should become medical dictator. Never before has a law-making body attempted to direct the method by which physicians should treat any disease.

Up to the time of the passage of the Act (Dec. 17, 1913), few physicians had even taken the time to make the slightest investigation into this world-evil. Little was known of it in this country, or in any other, for that matter. The drug taker could, and did, supply himself without the aid of the physician. If he desired treatment, he usually went to some quack institution where a secret cure was given, and the busy physician (for lack of knowledge) termed him a "doper," passing him up on a laity diagnosis as hopeless.

Gradual reduction was then presumed to be a cure. It sounded rational. De Quincy, being the only authority on the subject, gave the impetus necessary to cause Congress to endow a layman with the authority to say to the profession "treat addicts by gradual reduction methods only" and further to make such rulings from time to time, with the consent and approval of the Secretary of the Treasury as he saw fit, to put the law into effect, and that these rulings should automatically become a

part of the law thus endowing the Commissioner with as much power as both, Congress and the President combined, possess.

If any medical authority has been consulted before these rulings were made, it is not apparent.

Gradual reduction of dosage produces restlessness, insomnia, diarrhea (mild at first and, later, severe), loss of appetite for food, leg pains, and sneezing; in fact, all the symptoms seen in the usual case of withdrawal of drug. The demand for drug is daily increased until the patient stops the treatment, unless restrained by confinement, and if carried to termination, its use is resumed on the first opportunity. Therefore, we conclude that the discontinuation, or gradual-reduction, method is not a cure.

Neither are any of the delirifacients, atropine, hyoscine, and their kindred, of value in the treatment. It is hard to imagine why these agents have heretofore been so freely resorted to, in the face of overwhelming evidence of failure. Common judgment would seemingly preclude their use. Delirifacients to counteract brain stimulants!

Treatment Must Be Personal

In the treatment of these cases, it is first necessary to get on intimate friendly terms with your patient. To instill in him the belief that you will not permit him to suffer either for the lack of morphine or for kind and sympathetic treatment. This is necessary in order that the fear referred to heretofore may be attained. Once this confidence is established, further control of the patient is easily accomplished. His quarters in the institution should be suited to his station in life. He should be made to feel at home, in fact. He should regard his nurse as his guardian and not as his GUARD, his physician as his guide, his advisor and friend. He should be given a sufficient amount of morphine to completely appease his requirements; in fact, to make him comfortable insofar as morphine will do so. His food should be wholesome and attractively served. His conversation with other patients of the same type should be confined to other subjects than narcotics. This can be accomplished by properly trained nurses without offense to the patient. He should be encouraged and led, never driven.

The morphine should be continued from day to day until confidence is established, keeping in mind that the best results cannot be attained unless the patient is in balance when the final dose is to be given.

In the vast majority of cases, it will never be necessary to place the patient in bed during the

treatment for his addiction.

Insomnia and nervousness we have admirably controlled with the use of barbiturin, grains 2, every four hours. Leg pains never appear, and no sneezing is observed. The patient eats and gains flesh, he enjoys daily outdoor recreations and is never allowed to lose sight of the fact that he is regarded as any other sick person, and that he is receiving the individual care and attention that a sick person is entitled to, and the sympathy that his condition deserves.

His peculiar nervous affliction should be sought out and receive attention, proper remedies being administered. Finally, a discharge should never be granted until one week or more has elapsed after the final dose of any sort of medicine has been administered, thus assuring the patient that he has not been "propped up" by some temporary stimulant, to fall as soon as he is left on his own resources.

Prophylactic Measures

How shall we combat this evil for the future? How shall we proceed to stop the continued growth of this disease?

First, we must breed a better and more stable race. The psychopath should be recognized before adolescence. School inspectors should seek out children belonging to this class and report all to proper authority so that their families may be put on guard. Proper treatment will thus be assured in many cases before disaster overtakes them.

Next, an all important step is demanded. Few people in this country know the real source of opium more than in a general way. Opium is grown in India and under the supervision of the English Government. There, one can get land rent free, and borrow money, interest free, from the British Opium Department if wishing to engage in opium growing. Also, the assurance is given that the government will purchase the entire crop at prevailing prices, at maturity. I know of no other article of commerce in the world where so much inducement is offered to the producer. The Opium Department also supervises the growing of the crop and experts give advice freely to the grower in order to insure the greatest production at the least cost.

One is not long kept in darkness as to why this encouragement, if the Year Book of the British Government is consulted. We find that 51% of the gross tax of the entire colonial possession is derived from opium. We further read in the same publication that "opium has been used as a household remedy in India for centuries." Further on, it is recommended as such a remedy. This opium is, after harvest,

packed in chests, and collected in the various centers, Bombay and other cities, where yearly auctions are conducted and the world's supply of opium is sold.

The histories of the various opium wars indicate the startling fact that England has forced this traffic upon China for years. When China wished to purge herself of the evil, nearly a hundred years ago, she met British opposition and finally yielded, after years of bloody wars, paying England large indemnities in both, land and money.

The excess of opium production is stated to be about 100 times the necessary amount to supply the legitimate calls of medicine for it. This excess is wherein the trouble lies. After the sale of opium in India, it finds its way everywhere. China still gets her part despite the treaties.

Congress recently aimed to cut off this illegitimate surplus by enacting a law which pro-

hibits either import or export of opium except through the Treasury Department. This is a good law, but it will serve only to advance the price of opium and its products, and the smuggling will go on so long as there is an excess grown. The opium ring, like the liquor ring, will operate. British possessions are at our very door. The advanced price will bring it in.

The paramount problem to settle is that of supply.

I hope that the public will eventually come to see the addict in his true light; to understand him as the most unfortunate of all sick persons. Scorned by society, a slave to his affliction, he is in prison every day within himself. And, before passing final judgment on him, in our ignorance, it would be in place to remember the words of the Great Physician, "I was sick and in prison, and ye visited me, and, so oft as ye do it to one of the LEAST of these my Brethren, ye do it unto me."

Handling the Health Problem of School Children in San Francisco*

By PHILIP KING BROWN, M. D., San Francisco, California

Chairman, Committee on Nutrition, San Francisco Tuberculosis Association

EDITORIAL COMMENT—San Francisco's survey determining the physical condition of her school children, and the manner in which the problem of undernourishment was solved—without cost to the taxpayer—form an interesting study the lesson of which might well be applied in other communities. Improving the school children's health means a lot for a better health standard in the growing generation. The lessons of the selective service examinations should never be forgotten.

IN the spring of 1921, with the coöperation of the Boards of Health and Education, the Public Health Committee of the Civic Center, The California Tuberculosis Society, and a number of private individuals, the San Francisco Tuberculosis Society undertook to answer the question as to the extent of correctable physical defects in the San Francisco public-school children and the percentage of children so dangerously underweight for their height that they represent what is described as a state of malnutrition. This survey was an application of the lesson learned in selective-draft examinations, that the youth of America was nearly 50 percent unfit for the highest type of physical service, and this largely because of correctable defects. The details of our survey were as follows:

Combined Report of 93 Schools

	Whole School	1% underweight group
Number of pupils.....	44500	
Number underweight.....	14812 33%	
Number of 7% and more underweight.....	9394 21%	9394
Posture defects.....	17904 40%	4960 53%
Teeth defects.....	39009 87%	8206 87%
Tonsils diseased.....	14978 33%	3193 33%
Tonsils removed.....	14232 32%	2884 31%
Adenoids.....	11318 25%	2675 28%
Anemia.....	4450 10%	1439 15%
Glands enlarged.....	15790 35%	4096 43%

The immediate question arises as to what San Francisco is going to do about this. In anticipation of being asked to lay out a program, the San Francisco Tuberculosis Society had been making a study of the various methods for correcting malnutrition on a large scale and was prepared to put trained experts into the field to carry on, in San Francisco, the most approved method of meeting the problem, under the direction of the Boards of

*Read at the Annual Meeting of the California Tuberculosis Association, at the Symposium on Nutrition, Oakland, February 4, 1922.

Health and of Education.

The studies of Miss Ellen M. Bartlett, of the Home Economics Department of the Public Schools, concerning the dietary régime in a large number of homes, particularly with reference to the use of milk, excited her interest to improve the diet in the homes of the children who were being taught in her department. The Board of Education placed the handling of the proposed mid-morning bread-and-milk lunches in Miss Bartlett's hands, with the expectation that her twenty or more teachers could handle a large part, if not all, of this work. The mid-summer vacation of 1921 interrupted the work and, with the opening of school in the fall, the Board of Education requested that the survey be completed of all the schools and that the bread-and-milk lunches be installed in all of them. As this entailed labor in Miss Bartlett's Department that it could not possibly meet, the Nutrition Committee of the Tuberculosis Society secured the services of Mrs. Mel, one time head of the Home Economics Department of Alameda County and elsewhere, to assist in the work of training teachers and children in the various schools to handle the lunches expeditiously. This part of the work proved so popular that the Board of Education consented to appoint an assistant for Miss Bartlett to help with the bookkeeping. At the rate at which the work has been going on, it seems likely, when the mid-morning lunches are established in all the schools, that the children will pay in about \$20,000 a month for bread-and-milk lunches at 5 cents each. The necessary bookkeeping was a serious problem, but it has been worked out satisfactorily by Mr. John S. Drum, President of the San Francisco Tuberculosis Society and, although only half the schools are now being served, the technical difficulties are not great.

Bread and Milk Lunches

The installation of the bread-and-milk lunches means the training of one teacher in the keeping of accounts for that school, the collection of the money each week on the day that the Bank of Italy sends around for the money for the thrift stamps, the supervision of the buttering of the bread in the early morning before school by at least 4 of the girls, whose hands must be washed and inspected before beginning the work, and, finally, the wiping of the caps on the bottles and either removing them or perforating the top with a sharp tool for the admission of the straw. The interest and co-operation of the various bakeries as well as the milk companies has contributed largely to

the success of this work. We have been able to purchase the milk in half-pint bottles, under conditions acceptable to the Board of Health, at the price of milk in quart bottles and, for a period, for even less. The bakeries have sliced the bread by machine and wrapped it in oiled paper. This has been an immense saving of labor. The straws are purchased in 100,000 lots. The equipment in trays, receptacles for butter, and knives for spreading costs about \$10 for each school. These equipments have been provided for by gifts from a number of houses handling such material in San Francisco, by the gift of \$100 from Mr. Max Rosenberg, and by purchase from the surplus fund which has gradually accumulated in the schools where the work has been most expeditiously done and where the largest number of pupils have taken the milk. Five tickets are sold to the children at one time, and there is no doubt that part of the surplus is due to the fact that some of these tickets are lost. Children who wish single bread-and-milk lunches are permitted to purchase at regular lunch time while the supply lasts. There is always a slight surplus in the course of the week, due to the average number of absentees. Occasionally, this number has been so great that there has been surplus sufficient to sell the balance at the noon lunch hour. In any event, there is no loss to the fund from the absentees, nor is there a loss to the pupils who are absent, because the ticket is good when presented.

When the rush of work prevents the workers from spreading a sufficient number of slices of bread, some of the children have received graham crackers. Donations of dried and prepared figs from the Fig Growers' Association at Fresno have contributed to the food value of the lunches, for brief periods.

Disposal of Profits

The question of what to do with the small accumulation of funds has been settled by the Board of Education, who issued a circular letter directing that the fund was to be used for nutrition purposes only. There are two necessary expenditures that are to be provided for by any extra funds. First, the equipment of folding cots and blankets necessary for maintaining a rest period in the nutrition classes. Secondly the providing of a certain number of the children, with lunch tickets, who cannot afford to pay for them and who *need the extra feeding*. The fund is so small that it cannot possibly cover the needs in this field in any one school and, for this reason, it was decided by the Nutrition Committee, with the consent

of the Board of Education, that the tickets should be distributed only to those children in the nutrition classes who were unable to pay for them. This will insure the operation of one important agency for the return of the malnourished children to normal and it will be a further inducement to the parent of such children to coöperate with the school doctor, school nurse, and nutrition worker in carrying out all of the recommendations for the overcoming of malnutrition. It is obvious that the free distribution of tickets is the function of the school principal and, upon the report to her by the school nurse, of the need of a child in the nutrition class for the lunches, if the parents' inability to meet the expense is deemed sufficient to her, the principal exercises her discretion in providing the lunch. The flocks of children who can be seen at recess time surrounding the neighboring candy store for a few pennies worth of food, that is frequently very undesirable but no doubt needed, is evidence enough that there is place for supplementary feeding.

No attempt has been made, until the present time, to induce the undernourished children to purchase milk. The reasons for this were, the desire to make the luncheons popular, and the absence of scales in the schools to determine the results. Early in the installation of this work, \$250 was collected by Dr. Adelaide Brown for the purchase of scales. The San Francisco Tuberculosis Society gave two additional sets. These proved so popular that the Finance Committee of the Board of Supervisors appropriated \$3,000 for purchasing scales for all the remaining schools. These scales are now (March 1, 1922) being distributed, and Miss Hagelthorne, head of the Department of Physical Education, has agreed through her corps of teachers to weigh and measure the malnourished children in all of the schools every month. It will be possible now to take up the task of *encouraging* the permanently malnourished to avail themselves of all opportunities for overcoming their handicap. Classroom weight-charts have been distributed by the Tuberculosis Society to every school in San Francisco and it is hoped that, when the service is working satisfactorily, the Board of Education may deem it wise to enter on the child's monthly report, that goes to the parents, a simple statement of the percentage above or below the normal average that the child's weight bears to its height for a given age. The efficiency of the public-school system and the careful guarding of its charges by the Department of Health constitutes a coöper-

ative work which is too little appreciated by the public. One outcome of this whole movement will undoubtedly be, to popularize the financial support of the Education and Health Departments, because of the very high standard of work that is being done by both of them in the interests of mental and physical development of the children.

Nutrition Classes

Nutrition classes have been referred to, and they represent the effort on the part of the School Department to so organize the most undernourished of the children that they may be more carefully watched by the Health Department for the study and correction of the factors making for malnutrition.

Physical defects and diseases are by no means the only factors entering into this problem. The faulty health habits, so well emphasized by Dr. W. R. P. Emerson, who has been the leader in organizing this nutrition work all over the United States, make up the largest item. In the order of their importance, Dr. Emerson has considered that, first of all, comes lack of home control (the disorganized, badly directed family, rich or poor, overfatigue, lack of food and faulty food habits).

It is obvious that the parents constitute the most important factor in the correction of these habits and, further, that only a limited number of children can be handled in such a class which meets for only half an hour each week. The classes are conducted by a special nutrition worker supplied in this instance by the San Francisco Tuberculosis Society, and attended by 20 selected children and their mothers, the school nurses, the school doctors and even the class teachers. In this way, all of the agencies interested in the child's welfare are brought together on common ground, so that the particular conditions attending the malnourished child can be studied and their relative importance determined. Too much money for candy or movies. No fresh air in the bedroom. Coffee and bread for breakfast. Too much outside interest or work. Too little sleep. Some physical defect that needs attention. All these harmful influences can be brought home to the parent.

The children are weighed once a week. The weight charts are hung up in the order of the amount gained by the child. The child and its parent are seated opposite the chart. Nothing could bring home to the parent so pointedly the reasons for paying attention to certain faulty health habits of a child as to see the rapid gains made by those children who have corrected their bad habits or defects.

As malnourishment has been shown universally to be a condition not related to poverty in any marked degree, but to be due to the failure of a parent to understand the importance of many of these health matters, the educational value of the class is enormous.

The classes are limited to twenty children and, as fast as the normal weight is reached, the child is graduated and the place filled with a malnourished child. It is interesting at this point to note that, in two of the schools where the children have been re-weighed and measured several months after the installation of the bread-and-milk lunches, the percentage of malnourishment has fallen on an average of nearly 25 percent, so that the work for the nutrition classes is going to be less and less as time goes on, not only in the prevention of malnutrition through sufficiently nourishing feeding but by the educational influence of the whole movement upon both parents and children.

Health Teaching

Another factor that contributes in some degree to lessening the element of malnutrition in the schools is the work of teaching health in connection with the daily routine of all the classes. In two schools and in the Normal school in San Francisco, the plan of the Child Health Organization has been carried out with teachers. By simple devices that appeal to children, these have been given a far more intelligent understanding for the need of eating certain types of food and the carrying out of a daily regime of hygiene which makes for better health.

Importance of Malnutrition

Reference to the table giving the results of our survey shows the importance of physical defects and obvious evidence of disease in the problem of malnutrition. A comparison of the figures for the whole group and for the malnourished group puts emphasis upon three points. First, that fatigue-posture, anemia, and noticeable gland enlargements in the neck are far more common in the children who are markedly undernourished. No comment is needed upon the reason for the fatigue-posture or the anemia, but of very great importance is the fact that 35% of the children in *general* show enlarged glands, while 43% of the malnourished group show them. Enlarged glands in the neck are evidences of diseased conditions, usually in the tonsils, although they may be also from skin disease, bad teeth, or other diseased condition in the head. It will be noticed that in both, the whole group and malnourished group, the percentage of cases of

diseased tonsils is the same and the percentage of cases where the tonsils have been removed is approximately the same. When the tonsils are diseased, the glands are invariably enlarged to a certain extent, but the frequency with which these glands are tuberculous is an exceedingly important matter. It is true that, since the pasteurization of milk in large cities, tuberculous disease in the glands in the neck of children is far less common than it used to be, but there is a sufficient number of studies of diseased tonsils, made by most competent investigators, to warn us that about 10% of diseased tonsils are tuberculous and represent the portal of entry of tuberculosis into children, to which not sufficient attention has been given.

The one other striking situation brought out by the survey is the fact that 87% of the children's teeth show conditions that should be corrected in the interests of health.

With the coöperation of the Dental Department of the University of California, and the Dental Hygienist in the State Board of Health, work has been begun in dental prophylaxis, supplementing the work already in operation under the San Francisco Board of Health, which is directed more toward dealing with serious conditions of the teeth. At present, 7 dental hygienist students, 27 women dental students and some of the men are contributing a morning each at the schools. The San Francisco Tuberculosis Society is providing extra portable dental chairs.

School Children's Clinics

In order to make possible the correction of these physical defects and a careful study as to what their significance is, especially in the children who do not return easily to normal, the Nutrition Committee felt it desirable to invite the formation of special school-children's clinics, to be held out of school hours in certain medical centers, where intensive studies could be made of the conditions underlying the malnourished state of these children who do not gain after correction of their faulty health habits. Of course, the clinics are not intended to interfere in the least with the relation of these children to their private physicians, but they offer to the solution of the problem an extension of the work provided for by the Board of Health and are intended to carry on the study of the physical conditions of these children to a further point than is possible in the schools, in behalf of those parents who wish it done.

The Board of Health is contributing a certain opportunity for studying the chest condi-

tions of these children by x-ray plates, and the clinics will carry out all of the established means of intensive study with the cooperation and assistance of the school physicians and nurses. For the time being, the Tuberculosis Society has provided an extra nurse who has specialized for some time in this type of work, and every effort will be made to give this work an educational character.

It is to the great credit of the Board of Health of San Francisco that its school physicians and nurses have accomplished so much for the physical well-being of the school children. Our survey shows no such malnutrition as exists in some of the large eastern cities, and this seems due in great part to the efficiency of the work that has been carried on for the past years by a corps of doctors and nurses altogether insufficient in number for the magnitude of the task.

Credit is due the Dairy Council of California for providing the additional finances necessary to secure a course of demonstration in nutrition class-work by Dr. Emerson, last November. The Tuberculosis Society, with the cooperation of the Boards of Health and Education, plans a nutrition course of two weeks at the opening of the next school period and will, undoubtedly, continue the provision of these teaching opportunities as long as it is necessary to provide skilled help for the conducting of the nutrition classes.

The Preventorium

Finally, there remains to be accomplished the fulfilment of the promise of the Finance Committee of the Board of Supervisors, that San Francisco shall, some day, have a Municipal Preventorium where the children, who need more supervision and care than can be given them in our school system and their homes, can be sent until restored to health. It is obvious that this whole system is going to uncover just the type of cases that need this sort of special care. In this way only, are we going to prevent adult tuberculosis, which is often the consequence of the insidious inroads of this infection in childhood. It is also obvious that the greatest success of such a preventorium can only be attained when the Board of Education and the Board of Health unite in a plan to provide the child, during its residence away from home, with all of the conditions necessary for the normal development of its

mind and body.

A few years of the successful operation of this whole program will bring about a contribution to the study of infections of childhood and their consequences, on a larger scale than has ever yet been made. No individual effort alone will do the work and it is only by coordinating all of these agencies that we shall finally do full justice to our responsibilities toward childhood. These responsibilities may not be shirked with impunity.

Résumé

The agencies cooperating in this undertaking were, the San Francisco Boards of Education, and of Health, the San Francisco Tuberculosis Society, several San Francisco Hospitals and Clinics.

The 95 schools in the city are attended by 49,000 children; a health survey was made of 44,500.

At the time of writing, mid-morning bread-and-milk lunches were given out in 48 schools, their number being increased by 4 schools or more each week. Nutrition classes, consisting each of 20 pupils, were held in 9 schools to which 2 were to be added each month. There were functioning 11 school nurses and 4 school physicians, 2 of the latter working full time and 2 half time. The San Francisco Tuberculosis Society paid one-half of the salaries of the full-time physicians. Special school-children's clinics for the intensive study of problem cases and for the special correction of physical defects, including tuberculosis infection, were held at Stanford Medical School, the University of California Medical School, Mount Zion Hospital, St. Luke's Hospital, Mary's Help Hospital. The drive for health education was participated in by the Modern Health Crusade, the Child Health Organization, the National Children's Bureau, Washington, D. C., the Children's Bureau, the California State Board of Health, the American School Hygiene Association, the American Child Hygiene Association.

Preventoria are maintained for the care of children who do not gain in the nutrition classes and whose physical defects have been corrected. Three of these are privately operated: namely, Hill Farm (camp), Sunshine Preventorium for Girls, San Mateo Preventorium for boys. One municipal preventorium is promised.

Successful Transplantation of Testicles

From Apes to Man With Histologic Findings

By MAX THOREK, M. D., Chicago, Illinois

Surgeon-in-Chief, American Hospital, Chicago

EDITORIAL COMMENT—In Doctor Thorek's account of his interesting researches, we miss reference to the fact that Dr. Frank G. Lydston, of Chicago, our own townsman, was the first to do a successful transplantation of testicle from human to human; to extirpate, later on, a portion of the implanted testicle and to describe and illustrate the evidences of vascularization and other histological findings. Doctor Lydston's first report was published in the Bulletin of the Chicago Medical Society for 1914. After that, he wrote several articles on the subject, the latest one in the Illinois Medical Journal for July.

THE subject of testicular transplantation in man is one of keen interest, not only to the surgeon but also to the layman. Exaggerated claims are frequently made the basis of fulsome newspaper accounts which, usually, smack of the sensational and are detrimental to surgical progress, as they give false impressions regarding the actual status of the subject.

There can be little doubt, however, of the practical importance of testicular transplantation; and no apology is therefore needed for this preliminary report of a new contribution to this chapter of surgery, viz.: the successful transplantation of testicles from apes to men, with histologic evidence of their functioning.

Although much has been written and much surmised regarding the actual results and effects of human testicular transplantations, yet there are in literature but a few cases in which such transplantations have been followed by any noteworthy durable success. In fewer cases still, has the actual taking of the graft and its vascularization been verified by submitted histological proof.

It is desirable, therefore, that the medical profession in general should have some clear knowledge of the present status of the operation and of what may be expected from it; also whether it is or is not likely to enter into the realm of practical surgery. For the procedure to become a matter of every-day practical surgery, it is necessary that surgeons should be assured that such grafts can become vascularized and that the tissue transplanted will function as living tissue. The value of such surgery must lie in the verification of these facts; any method of transplantation and all clinical reports of such surgery must ultimately be judged by the criterion of the "taking" and functioning of the graft.

When we study most of the cases reported in literature, we find that they do not fulfill

these essential conditions. The graft has either been rejected or has become absorbed. Whatever effects it may have had, have been of a transient nature.

In 1809, Brown-Séquard's personal experiments proved that testicular opothraphy could produce a marked physical and sexual improvement where the physical and sexual status had been impaired. A study of the voluminous literature, which has grown up since that time regarding testicular secretions and testicular transplantation, shows that the testicle has a double secretion; that of the sperm cells proper, or the seminiferous tubuli, and that of the interstitial glandular substance, the so-called puberty gland. The secretion of the seminiferous tubules alone is concerned with fecundation. The secretion of the interstitial gland has been clearly proved by a multitude of investigators to be a hormone acting on the general system. This is a male sexual hormone which acts as a sex stimulant and is responsible for the development and maintenance of sex characters and desire. As far as known, it is not connected with the generative function.

The knowledge gained, as well as the actual findings of Brown-Séquard regarding the good effects of glandular opothraphy in reviving physical and sexual well-being in man, led naturally to attempts having in view the induction of the special hormonal secretions in organisms in which it was deficient. The best known of these methods is that of testicle transplantation.

That free testicular transplantation was possible, was proven by multitudes of animal experiments, whether it was a matter of an auto- or a hetero-graft. These grafts "took" at times and at other times did not. The reason for the sloughing or absorption of the graft, as well as the difficulty of vascularization in these freely transplanted auto- or hetero-grafts might perhaps have been due to faulty tech-

nic, or to the fact of heterogeneity, or because the graft was implanted in an unsuitable region, or to a combination of these causes. In 1919, Voronoff, of Paris, reported very brilliant experimental work in animals with testicular transplantation. These results were supported by the histological findings and proved that, after transplantation of testicular tissue from young to old animals of the same species, vitality of the graft was established and the operation could be expected to be followed by clinically demonstrable renewal of

Through study of the literature of the subject, and especially after visiting the clinics of Voronoff, in Paris, and Steinach, in Vienna, I became convinced that testicular transplantation could become a matter of practical surgery.

The difficulty of obtaining vascularization would, I believed, be overcome by a suitable method of implanting the graft and by selection of a better site for it than those usually adopted.

The great difficulty, however, lay in obtaining suitable material for grafting. That human



Fig. 1. Photomicrograph

Transplant of testes of higher ape into human. Author's technic. Magnification 60 diameters. Observe regression of tubuli seminiferi, proliferation of interstitium and vascularization. Removed four months after transplantation.

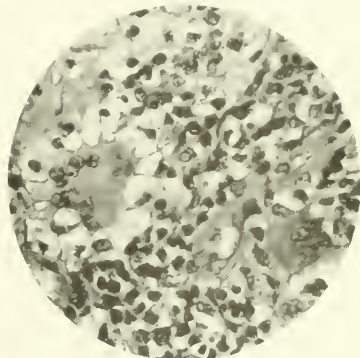


Fig. 2. Same

Magnification 560 diameters. Observe Leydig cells, giant cells and abundance of cell life in well nourished area.

physical and sexual vigor and sexual impulses which had become lost.

In man, the attempts at testicular transplantation having for their object the renewal of physical and sexual well-being have been comparatively few and only partly successful. In many cases, the graft was expelled or became absorbed. Only in very few cases was it verified by histological investigation that the graft lived.

There was no doubt, however, that, in most cases, the graft (as long as it functioned) did effectually promote the physical and sexual well-being of the patient in whom such a transplantation was made.

There could be but little doubt, therefore, if some practical method could be found by which the taking of a testicular graft might be assured, that it could be counted upon to restore lost physical and sexual capacity by the effects of its particular hormone on the whole organism.

testicular tissue, if young and obtained from a subject free from disease, was the ideal material there could be no doubt; but, such material was manifestly difficult to obtain for very obvious reasons. The next-best thing was, to obtain material from animals of the nearest biological approach to man, although the results of experimental transplants from animals to man did not hold out much hope for success.

By a series of experimental investigations, carried out during some years, I have devised a new technic in treating and implanting the graft which I call the "lantern" method of testicular transplantation and which has given me most satisfactory results, as regards the taking and vascularization of the graft.

The difficulty of obtaining suitable material has been met by using the testicles of the higher species, the blood of these animals being biologically almost identical with that of man.

I have succeeded in successfully transplanting testicles from the higher apes to man and

have obtained clinical and histological results which are in every respect analogous to the best results previously obtained in transplantation of human testicles.

Such testicles transplanted from apes have been removed from the human hosts after several months and are histologically proved to be living, well vascularized, and with full activity of the interstitial glandular tissue. As far as I know, this is the first time that such a result in a transplant from ape to man has been histologically verified. The accompanying illustration is the reproduction of the microscopic

examination of a section from a testicle removed several months after transplantation.

It shows regression of the seminiferous tubules, proliferation of the interstitial elements, and vascularization.

I have made a large number of such transplantations from ape to man; and, in the cases in which I have employed my improved lantern technic, I have almost invariably obtained excellent results. The full details of my surgical method and clinical findings in all these cases will form the subject of a later complete report.

The Successful Treatment of Chronic, Non-infectious Vaginal Discharges with Atropine

By FERDINAND HERB, M. D., Chicago, Illinois

THE correct treatment of chronic vaginal discharges still leaves much to be desired. This regrettable condition is, unquestionably, due to our hazy knowledge of their underlying causes. The results obtained in the treatment of these discharges are, therefore, usually not what they should be, if I am to judge from literature and referred cases. While the methods of treatment employed by different practitioners vary from simple medicated douches to frequent curettements, they have one thing in common: They are directed against local conditions only and take no consideration of the influence which remote conditions, and especially the nervous system, may have in producing and sustaining these discharges.

It is especially the influence which the nervous system exerts in causing vaginal discharges of the most obstinate, chronic form, to which I wish to call attention in this discussion. This influence once appreciated, the simple and most satisfactory remedy required in these cases suggests itself and will help the general practitioner to render thoroughly satisfactory services to many of those women who at present shift from one physician to another and, finally, either land upon the operating table or resort to patent medicines.

Nerve Supply of Female Genitals

It would not serve our present purpose and be of little advantage to our practical aims to give here a detailed description of the nerve supply to the female pelvic organs. May it, therefore, suffice to state that woman's sexual organs are dominated by the pelvic nerve, a branch of the great vagal system. This vagal

system represents that part of the involuntary or vegetative, nervous system which is opposed by the antagonistic sympathetic. The widespread distribution of these two parts of the involuntary nervous system through their numerous vagal and sympathetic branches extends their influence throughout the body. Thus, the vagal system supplies, roughly speaking, motor fibers to the sphincter pupillæ, secretory fibers to the salivary glands and upper air passages, motor fibers to the heart, motor plus secretory fibers to the bronchi and lungs, and motor plus secretory fibers to the esophagus, stomach and bowels. Anatomically, its ganglia are characterized by the fact that they are located within, or very close to, the organs they control, in contrast to the ganglia of the sympathetic, which cluster in the gangliated cords and the large gangliated masses closely associated with these cords. Vagal ganglia are represented by such accumulations of nerve cells as the ganglia of the heart and the plexuses of Meissner and Auerbach, of the bowels. Similar gangliated plexuses have been demonstrated by Dr. J. Hoogkamper (*Arch. f. Gyn.*, vol. 99, p. 243) in the walls of the uterus and are readily visible in the photographic illustrations he furnishes.

This superficial sketch of the distribution of the vagal system seemed necessary for two reasons: First, to aid the diagnosis of the nervous origin of chronic vaginal discharges (as we shall see later), and, second, to emphasize that both motor and secretory fibers are supplied by the greater vagus to the organs it controls.

The latter fact is true also as to the uterus. Its vagal nerve supply, running in the pelvic

nerve, is motor as well as secretory. Of these, the motor supply is too well known to require further stress.

Very little, however, if anything, is said in literature about secretory fibers supplied to the uterus. The experience which drew my attention to the influence of the vagus upon uterine discharges was the spontaneous remark of some patients to the effect that vaginal discharge, when aggravated, made them very weak. Later on, I found the same phenomenon more frequently in other patients, upon inquiry. From the start, I was convinced that the loss of discharge could not possibly be the cause of the weakness, as the women supposed. But, in spite of diligent search and study during the years that followed, the connection between discharge and weakness remained a mystery to me, until closer investigation of the involuntary nervous system, especially by Lanley and by Gaskell, broadened our knowledge on the distribution and the functions of the greater vagus. In addition, a flood of light was thrown upon the vagus from a pathological standpoint by Eppinger and Hess, of Vienna, in their book on "Vagotonia". It greatly stimulated a renewed interest in the now more transparent connection between vaginal discharge and the general weakness connected with it.

Following these leads, it soon became apparent that discharge and weakness do not act as cause and effect, but are simply coexisting symptoms of an underlying vagotonic disposition, affecting principally the pelvic nerve. Whether or not other vagotonic symptoms are associated with the chronic vaginal discharge of nervous origin, depends upon the extent to which the vagus is affected. The more we search and the better we are acquainted with the picture of vagotonia, the more often we will find additional proof to show that this kind of discharge and other existing symptoms are but local manifestations of a generalized derangement of the nervous system. However, two frequent symptoms deserve mention here: constipation and nervousness. They will find special consideration later, when the treatment is suggested.

Causes of the Vaginal Discharge

Chronic and long-continued irritation may lower the threshold of the vagus for nervous stimulation to such an extent that also irritations of less degree become effective. This lowering of the vagal threshold may be general when due to general conditions, such as syphilis or other chronic infections, overin-

dulgence in stimulants, work or pleasures, inanition or other causes; or it may be only local, as it is frequently found in the sexual sphere. It is evident that, in the case of a general vagotonic disposition, local irritation will produce pathological symptoms more readily and will cause them to be more pronounced than if such general disposition is not present. Consequently, the same irritation may cause vaginal discharges to become chronic in one case, while it has no such effect in another case. Such local irritation is most frequently caused by gonorrheal infection. If nervous hypersensitiveness is once developed, the discharge may continue after the gonococci have disappeared, as less irritating causes, ordinarily ineffective, are now sufficient to produce discharge. These conditions are analogous with those existing at other parts of the body, especially in the nose, throat and lungs, where chronic discharges of this kind are not infrequently produced. Of other causes that lead to the same effect by originating vaginal discharges, that are later continued and sustained by nervous irritation, may be mentioned: cervical lacerations, displacements, parametritis, chronic congestions of various origin, withdrawal, and syphilis.

Diagnosis of the Vaginal Discharges

Cases of vaginal discharges of nervous origin are characterized by their essentially chronic character, their obstinacy in yielding to the ordinarily used local remedies, and by the absence of the gonococcus. The diagnosis is supported by the presence of other vagotonic symptoms. The original cause may, or may not, be coexisting. The discharge itself offers no special features, though it is usually thick, tenacious and of yellow color.

Treatment of the Affection

It is obvious that the removal of the local irritation, if it still exists, is the first thing to be accomplished. A Wassermann test should exclude syphilis. The sexual life must be regulated. An aroused sexual passion that is not satisfied is apt to lead to chronic congestion and to discharge that cannot possibly be stopped unless satisfaction is secured. Antiseptic or astringent remedies may occasionally be of benefit. Careful pelvic massage is the most efficient remedy in all instances in which pelvic adhesions or chronic parametritic infiltrations disturb the circulation and curtail the blood supply.

The most efficient drug is atropine. Its power to curb the secretory function of the vagus is well known. It is successfully used to check discharges from the nose, the throat and bronchial

tubes, and to reduce gastric hypersecretion. In the sexual sphere, its influence upon secretions is not so conspicuous, but it exists and is unmistakable when the drug is used in appropriate cases. Its first effect is usually upon the coexisting constipation. By relieving the spasm of the bowel, atropine secures a regular, soft daily movement. This effect is rarely missing. It is quite a blessing for many women. In cases where nervousness exists, less irritability and more restfulness follow next. General health and looks also improve decidedly in many instances. At the same time, the vaginal discharge begins to diminish and is gradually reduced more and more even without local treatment, if the irritating cause does no longer exist. If it is still in existence, the discharge yields, under the influence of atropine, to appropriate measures that formerly produced no results.

The regular daily movement of the bowels, which follows the exhibition of atropine in nearly all instances where constipation exists, is, without doubt, at least partially responsible for the beneficial influence of atropine upon the vaginal discharge. It should, therefore, receive most careful attention and ought to be encouraged by additional hygienic and dietetic measures.

How to Give Atropine

Atropine is most conveniently given by mouth. Owing to the fact that the drug is occasionally not well tolerated, it is advisable to begin cautiously with about 1/100 grain of atropine sulphate divided into two parts, one half in the morning and one half in the evening. If this small dose has no untoward results, I rapidly increase the amount until the physiological effect is achieved, namely, a slightly dry mouth and throat, or, occasionally, blurring of the vision. Two or three doses, of 1/100 grain each, usually suffice for the purpose. This dose should then be maintained. If not enough is given to produce this physiological effect, the benefit derived from atropine is insufficient or wanting. If too much is given,

the patient is made unnecessarily uncomfortable.

The length of time atropine is needed varies. I have seen cases in which a moderate dose given for two to three weeks not only relieved discharges of long standing but also permanently cured coexisting constipation and nervousness. Such quick results, though, are exceptional. As a rule, atropine must be given much longer and sometimes for many months to sustain the results. However, no matter how much I have given or how long I have given atropine, I have never seen any lasting bad effects from its use.

If very large doses are required to produce the physiological effect, and, especially, if such doses must be continued for a long time to keep up the results, constitutional complications, such as syphilis or acidosis, are usually present and should be looked for. In the case of acidosis, even if of less degree, it is highly desirable to assist the atropine with enough sodium bicarbonate distributed over the day and given in water direct after meals, to keep the urine just below the point of alkalinity, slightly on the acid side, when tested with litmus paper. Any well-instructed patient can be trusted to make these tests.

As atropine is a harmless and safe remedy at the hands of the careful physician, a trial with it can be made safely and with good prospects in all instances of chronic vaginal discharge that do not yield to local treatments alone, or that present the attributes of and point to vaginal irritation. Even in such cases in which gonococci are still present, atropine, if given in addition to the regular treatment, appears to shorten the duration of the disease and has distinct value in preventing the development of chronic localized nervous irritation. If employed from this broader standpoint, it has rendered me invaluable services in many of my gynecological cases and may be relied upon to give fullest satisfaction if employed persistently, judiciously and without unreasonable expectations.

Memoirs of the World War

By GUSTAVUS M. BLECH, M. D., Chicago, Illinois

[Continued from August issue, p. 587]

CHAPTER VI

A Hospital City

DIVISION Headquarters placed at my disposal an automobile which was to carry me and my belongings to Bar-Le-Duc. Colonel

Chiperfield accompanied me, as he had some matters to attend to in that city. We left Fromèreville early in the forenoon, passed through a small village containing our second echelon headquarters and soon reached Souilly, headquarters of our army corps.

As we entered that city, I expressed my re-

gret at leaving the front with its many pleasant associations. At that time, though we all felt that the enemies' forces were weakening more and more under the combined allied pressure, none of us believed in a decided victory during 1918. The most sanguine expressed the hope that the Germans would ask for peace terms, in a manner to save their faces, just before Christmas.

Though I felt that I should have a chance for congenial work under more favorable external conditions than had been our lot at the front, I could not rid myself of a feeling of oppression. The sun was out in its fullest glory. One would imagine we were in mid-summer. I usually experience a sense of exhilaration, or the joy of living, on days like this; but, today, cold, chilly, rainy weather would have suited my frame of mind. I confided these sentiments to my traveling companion.

"I understand," Colonel Chipfield commented, "but you would not be satisfied even if they made you corps surgeon. See that camp yonder? That is one of the evacuation hospitals of our corps. You will be right in your element when you get command of such an outfit—and you will that, mark my word."

It was a cheering speech, all right; but I had no faith in my companion as a prophet. The scenes began to shift. I had traveled the same road once before; this time, though, I noted details to which I had paid little attention on a previous occasion.

Away from War

We passed town after town with an aspect of normal conditions. We saw women in mourning, and a good many in summer clothes of attractive hues. Houses were in good condition, gardens in bloom, stores and wine shops open, the desolation and loneliness, the primitiveness of the panorama of the front were conspicuous by their absence. Here we saw human society in its daily work, the evidence of an existence unhampered by lack of necessities and undisturbed by the dangers of warfare. One could imagine to be on a pleasure trip, were it not for the knowledge that, in an hour's ride west, one's comrades were facing every minute a bloodthirsty moloch, lurking on the earth, in the air and even under the earth. We reached Bar-le-Duc at about one p. m. The chauffeur was sent to a hotel for dinner; Colonel Chipfield and I ordered luncheon in a first-class restaurant.

Alcoholic drinks were not available, the French military authorities having strictly forbidden their sale in the advanced zones, but we

secured some American cigars and I endeavored to relax for a few minutes after the really good meal. There was no use hurrying. In almost all towns in France, all stores close for luncheon from noon until two o'clock. I had learned by inquiry that I was too late for the day train for Chaumont, and that no train was available until four in the morning.

All Roads Lead to—Paris

Chaumont is almost directly south of Bar-le-Duc. Paris is located directly west of the city. But, Paris is the railroad heart of France. I have even seen troops shifted from one section of the south to another via Paris. I know that any officer receiving travel orders that did not specify routes was within his rights to go via Paris, even if there was a more direct route. This was taken advantage of to such an extent that orders were published forbidding officers and men, not sent to Paris, to remain in the capital longer than between trains. To what extent these orders were obeyed or, rather, disobeyed, only the Provost-Marshal's office knows; for, in spite of systems of checks which were established at all important railroad centers, many officers and men managed to imitate the inimitable Houdini.

However, I did not intend to visit or pass through Paris as long as there was a more direct route available, for it had nothing to offer me. What little I may need for a prolonged absence from a base, I could find right in Bar-le-Duc and, as Colonel Chipfield was anxious to make an early start for the front, I assisted him on his shopping tour. At about three, he loaded all his parcels, some of which were for other officers, in the automobile, jumped into his seat and, without a word, we shook hands just as the machine started. I looked after the vehicle until it disappeared from view.

As if to spite myself, I decided to "enjoy" myself. The first thing I did was, to secure a room in a hotel very near the railroad station. My baggage having been left at the baggage office as soon as we arrived in town, all I had on my person was a canvas bag hung over my shoulder, rather heavily laden with a toilet case, smoking material, books, extra underwear, towels, etc. I left the bag in my room and went to the business section. The first "enjoyment" was a disappointment. I was looking for a hot bath, but the bath houses were open only two days of the week, and this was not one of the days. My fountain pen was not functioning well, so I decided to add another to my possessions. I asked for the price of one which in the States would cost no more than

three or four dollars. I do not recollect what price the saleswoman asked, but it must have been big enough to stagger me, for I recollect I let loose an "Oh, là, là, là!" and left the store as if I were bitten by a mad dog. The young woman smiled and said something about import and taxes. Inwardly I replied "to hell with your taxes."

I fared better in a tobacco store. A tobacco pouch of gray chamois, which lasts me to this day (and, by the way, this is one of the very few articles that did last) was obtained at the ridiculously low figure of three francs, or fifty-seven cents. Of course, I had to buy another of the fifty-seven varieties of cigar-lighters, so popular in France. A French book dealing with the question whether the Germans were really as scientific as the French (I knew the answer before reading the book but I wanted to see how they would make out a case) concluded my "spree" and I returned to the hotel for a "shower" bath—my shower-apparatus consisting of a large marine sponge.

At six, I went to the dining room for dinner. At one table sat American Negro officers. A French colonel and his wife took a table adjoining theirs. The Negro officers rose as one and stood at attention. The French colonel brought his hand to the side of his vizor; his wife made a slight bow.

Our Negro Troops

The Negro officers ate their meal with a dignity that pleased me very much. Had they not been in the uniform of American subaltern officers, I would have believed them to be high dignitaries of some African nation. The dignified conduct of these officers and their good table manners contrasted sharply with what I had seen in the restaurant at luncheon. There, young white officers were noisy, flirted with the waitresses, and generally would have attracted attention, were it not for the fact that the French guests, who themselves talk a good deal at the table, had, doubtless, become accustomed to these scenes.

The Negro troops enjoyed their stay in France immensely. I recollect that, during my service at the Mexican border, the Negro officers, unaccustomed to the Jim Crow laws, resented with bitterness being forbidden to take seats on street cars reserved for white people or to enter many of the better restaurants in town. The Negro officers and soldiers of the Illinois regiment in Camp Logan for some time did not visit Houston outside of the Negro section. In France, the people do not discriminate between whites and blacks and intermar-

riages are no rarity. Later, I had to confront, on more than one occasion, some delicate situations requiring tact and, to a certain extent, bluff. But, I must say that our colored officers and men as a whole carried themselves admirably, sometimes under very trying conditions, and they were rewarded by being met by responsible white officers with a courtesy which was spontaneous.

Travel Experiences

The rooms adjoining mine were filled with young American officers. They were drinking wine and sang American songs until midnight. Sleep was impossible. I knocked at the neighboring door, was admitted, introduced myself, told them I had but three hours before me and wanted sleep. My neighbors ceased singing and asked their friends in the other rooms to stop.

Where these officers secured the wine, I do not know—or, maybe, there was no prohibition against light wines. Still, though there were many empty bottles on the table, not one of the officers was drunk. They, too, had been at the front and, like impetuous youths, sought diversion and a little gayety. *Iloni soit qui mal y pense!*

Just as I returned to my room, I heard the well-known tramp of heavily shod feet. I looked through the window and saw battalion after battalion of American troops in heavy marching order pass through to a troop train. The sight of our men marching to the front was no novelty to me. Nevertheless, there was a lump in my throat.

At four a. m., I was on my train. I was instructed to get off at Vitry-le-Francois and there change for a train going south. I was the only passenger in the compartment and soon was sound asleep on the cushions. The conductor woke me a few minutes before six. I saw the sign on the platform and got off. The little city, which had acquired much publicity when invaded by the German hosts in the early part of the war of 1870-1, presented nothing of special interest. The same simple houses, narrow lanes, poorly-paved streets, that I had seen throughout northern France, could be seen here, too. The monument on the market place was no different from those seen in other small towns whose inhabitants saw fit to honor some distinguished compatriot or the Maiden of Orleans.

I have one pleasant memory of my two hours' stay in the city. A French gendarme recognized me as a medical officer and asked me to see his sick niece. I went with him to

his home in the neighborhood and gave advice. He insisted on my taking a fee, but, of course, I refused. Before I left, he told me that he had a brother, an artillery officer, killed in the war, and he gave me his leather dispatch case as a souvenir. I secured a tin cup of coffee, *sans* cream and *sans* sugar, at the French military canteen at the station and this was my breakfast. An hour later, I began to suffer from heart burn. Fortunately, I carried in my bag a bottle of soda tablets.

Russian Officers

Chaumont was reached at noon. A French officer with whom I traveled advised me to lunch at the station. I intended to lunch before leaving the station, as I noted the formalities which even ranking officers had to go through before entering the railroad shed; but I had no bread tickets. The marine-sergeant at the gate, however, gave me all the tickets I wanted before registration. The meal was excellent and inexpensive—four francs. Opposite me sat a French artillery captain on leave for two weeks, as he told me. I noticed a young Russian infantry officer at a distant table.

"What does the Russian officer do here?" I asked my vis-à-vis.

"*Il dîne.*" There was sarcasm mixed with bitterness in the words: "He lunches."

"Yes, yes, I see, but what else does he do?"

"He dines and sleeps. Ah, my Major, these Russians live like lords while you and I toil. They have one endless vacation—such *canaille!*"

A few months later, I happened to be on official business in a city and, there, was introduced to a Russian Colonel. When we happened to be alone I asked him in Russian how things went with him. He stared at me as if thunderstruck.

"Russkij?" he questioned, but a second later added with a headshake: "No, you have a foreign accent; but comrade mine, tell me something about yourself. Few Americans know our language. Were you ever in Russia? Lately, perhaps?"

He had spoken excitedly and fast, but he had the modulated voice of the educated Russian and I could follow him with ease. I enlightened him, that I learned Russian through the accident of birth when a schoolboy and that I had seen a few Russian cities and villages, but that my early boyhood was spent in the Baltic provinces; that I kept up what little Russian I learned through occasional reading of technical magazines.

Then he unbusomed himself.

"Things are horrible, comrade mine; nothing, absolutely nothing, to do. If it were not for these epaulets (pointing to his shoulders), I should have sought work as a farmer, as a clerk in a grocery store, or even in a factory, but I am on French pay. Nothing to do; do you know what that means? I have often held the pistol in my hands, but I have a wife and four children in the fatherland (Rodina). If it were not for them—"

"Oh, this Kerensky, he has brought ruin on us. Do not think I am a czarist. I am a soldier (he actually said 'soldier' and not 'officer,' as most Russian officers were in the habit of referring to themselves, years since) and I fought and suffered for my land, and I would not have cared who rules, just so our country would not be sold out to the Germans. But, it is all over now."

"Mister Colonel, about Kerensky, do you mean to tell me he sold out Russia?" I exclaimed.

"No, no, my dove, you misunderstand me. He did worse. He abolished our right to exact salutes. The soldiers greeted the delegates from Russia who came to announce to us that Russia is no longer a monarchy but a free republic. The soldiers were asked to take an oath of allegiance to Kerensky. They did, willingly. They wanted to go back to Russia to fight for the republic. There were others who balked. Yes—the salute. If they did not have to salute us, we were no longer their officers. They would decide what to do, what not to do. Why, they began to spit at us. An order came to disarm them. They refused to disarm and we had to turn machine guns on our own troops. Think of it, comrade, fratricide! Many were deported to Africa; many remain here as laborers on farms. We try to keep the companies together. A little paper work in the chancellery is all that my juniors and a few soldier-scribes (*pissarji*) have to do. I seldom have even that much."

"But, why do you not write? You can help build up your future army; you could send popular articles to Russia and arouse the people."

"No, no, no. I have tried several things. We have no government, no authority, no future. It is all black."

Reporting for Assignment

The marine sergeant telephoned to the base hospital notifying them of my arrival. They sent an ambulance, secured my baggage, and we drove to the outskirts of the town to the hospi-

tal, established in French cavalry barracks. The adjutant enlightened me that I was only a casual, that I would have to report in the morning to Colonel Keller, at General Pershing's headquarters, and that the colonel would decide on my assignment. Colonel Keller was Director of the Professional Services.

I was assigned a bed in a ward which served as quarters for casual medical officers. As I entered, I noticed about ten or twelve medical officers, first lieutenants, captains, majors, and one lieutenant colonel, stretched out on the beds, sleeping or reading.

"What are you in for?" a major greeted me, half-rising. "This, my dear sir, is the tavern of free and independent homeless tramps, wanderers who pass each other like ships in the night with a cold hello."

The man had an intelligent face. I hardly knew how to behave under such surroundings. But there was cordiality in the tone.

"Hello, yourself, old fellow tramp. Behold in me a grizzly veteran of dozens of battles, thrice decorated for bravery—the battles of Vin Rouge, Mount Nicotine and Sandwich Pass, to say nothing——"

"That's right, you bum, say nothing."

Introductions followed. The man who greeted me was a gifted, well-known surgeon from California, whose contributions to the literature of surgery I was acquainted with. I wish I could mention his name! But, that will not do; for, behind the man inclined to frivolous speech, there was a deep thinker who was merely bitter because he had been taken away from his hospital and sent with an operating team to various evacuation hospitals, where he had performed many operations. He was enthusiastic about the professional side of the work, nevertheless.

"Why rave, then?" I asked him. "I can only envy you."

"To h—— you can. How would you like to be driven from hospital to hospital to find several days' work ahead of you and not a place to sleep and d—— little to eat. And, do you think the hospital officers bid you a hearty welcome? Not much. You are here, work till you drop, and ask for nothing. That's what they seem to tell you when you report. Oh! these inflated commanding officers, these ignoramuses, these paper surgeons!"

I began to laugh.

"What tickles your laugh-center, you old bum? Wait till your alderman comes down and you won't laugh."

"The laugh is on you. I was going to ask

Colonel Keller to give me command of an evacuation hospital; but, after hearing you, I guess I'll ask for a team."

"Oh, you are one of these regulars, masquerading as a surgeon; ever operate here?"

"Yes."

"What?"

"A confidence game."

The other officers came up, shook hands, took me in tow, and saw to it that I had a bed near a light. I have endeavored to repeat the conversation between Major "X" and myself as correctly as I remember, merely to show that even dignified college professors—for such he was in civil life—do not lose their humor under trying conditions.

We sat up until one in the morning talking about the advances in war surgery. What wonderfully well-posted men they were! America's best surgeons at the front! I felt proud to be the colleague of such men.

The next morning, I walked to headquarters. Colonel Keller had his office on the top floor of the building. I ascended the stairs with misgivings. A few minutes later, I sat near his desk and made my report. He asked me a few perfunctory questions.

"How old are you?"

"Forty-eight, Sir."

"Go back to your headquarters. You will get orders soon."

I had planned to submit my wishes but I could not say another word. When I returned, my "tormmentor" fired a volley of questions at me.

"Did the all-mighty Mogul hug and kiss you? Did he kow-tow to you and offer you a palace for you to rule in as a czar?"

"Yes and no."

"Well, out with it. Did you get a team?"

"Not yet."

"I bet you don't get one."

"What in d——nation will I get?"

"What we all get—in the neck."

My newly-found friend got an order to go to Sonilly.

I told him I just came from there.

"Another desert-hole?" he asked.

"No, you are wrong. A nice evacuation hospital; plenty of room there. I'll give you a letter to a friend of mine. I said before, and I say again—I envy you."

He packed up his rubber boots, his blankets, his instruments. His assistants came in. Soon, a truck appeared and he left with his little family. After he had gone, the room seemed empty.

At the dinner table I found a stack of open letters on my plate to be censored by me. I read them all. They were from patients and nurses. The patients wrote to comrades at the front, their folks at home. Here and there, a word had to be stricken out, because the language was a bit too brisk; but otherwise not a thing was found that could be objected to. Those who betrayed their foreign nationality by name and writing wrote a good deal about their "battles", but there was pride in it. I saw Italian letters, I censored a letter written in one of the Slav languages—all breathed a spirit of patriotism.

The nurses' letters were mostly complaints about the slow and rare mails, praises for their charges; occasionally, a tender missive. I complied with the law by getting the gist from the beginning and the ending, and let it go at that. The nurses should have been permitted to censor their own mail, they could gather no information of value in their wards, even if the wounded had given them all the facts they knew.

Two days after, an orderly called me to the office. An order was handed me. I was ordered to Mars Hospital center for duty.

Alca jacta est!

Ordered to Mars Hospital

There was an American military train leaving in the afternoon. I sent my baggage to the train, paid my mess bill and walked to the station. The American military train consisted of French passenger coaches, but was operated by American railroad troops. A colored soldier acted as a porter. There were no beds but the cushioned seats were drawn out and each officer given three, enough to lie down on full length. The porter handed each passenger a blanket. Pillows were not available. We passed through Dijon and Langres.

It was about nine in the evening. I took off my shoes and leggings, arranged my bag as a pillow and went to sleep. It required some time to get my head used to the unaccustomed "pillow" and sleep was often interrupted; still, I slept fairly well at that.

At half past six, the Negro soldier tapped me on the shoulder. I arrived at Nevers a few minutes later. At the station, I learned that there were two trains daily to Mars; one at 6:11 a.m. and one at 6:11 p.m. The morning train had gone an hour ago. I re-checked my bedding roll and basket of books and went into the town in search of breakfast.

A few blocks away, there was a Red Cross canteen open day and night. American women

served food at little cost. I ate a simple breakfast and asked for cigars. I could get them in town or at the commissary some distance from the station. The stores were already open but, after vainly trying a few, I hired a cab and was driven to the commissary. There I secured tobacco and a box of cigars.

Thus, laden with priceless treasures, I went to satisfy the spiritual man. The town had an interesting museum, antiquities, very old churches. The river Loire, though still half dry, presented a beautiful view. A huge stone bridge of Roman architecture attracted my attention. I saw small detachments of German and Austrian prisoners of war marching across it, escorted by two French soldiers with fixed bayonets. At the station, two German soldiers were transferring freight on hand cars. They were not watched. A train arrived. Many soldiers in German uniforms were looking through the car windows talking to the people in perfect French. They were Alsations—deserters, as they claimed. They had fought on the Russian frontier for a long time. When ordered to the French front, they deserted at the first opportunity.

"Maintenant ils sont Alsatiens" (now they are Alsations), one woman expressed herself with bitterness and sarcasm in her tone.

"Neither fish nor flesh" I said to myself, glad in my heart that I was an American citizen unconcerned with all their problems of nationality. I lunched at the Red Cross canteen. On the street, I bought view cards, magazines, and some souvenirs. At last, it was six. A few American soldiers were at the station. As they were hospital-corps men, I talked to them. They were stationed in one of the base hospitals at Mars. We entered a compartment. I learned that Mars was only a short distance from Nevers—three-quarters of an hour by truck—but the train never made the distance in less than three hours. Indeed, the journey was interrupted by frequent and prolonged halts. The soldiers were former college boys from California. They invited me to come to their hospital after reporting my arrival. They would have a supper ready for me. I gladly accepted the invitation.

It was near ten o'clock when the little flag station was reached. We had to walk nearly half an hour before reaching "camp." There was a light in the headquarters office. The non-commissioned officer on duty informed the commanding officer (Colonel Skinner) of my arrival by telephone. He ordered the sergeant to take me to his room. His residence was a

short distance from the office. The Colonel had already retired, but he received me and asked a few questions. He sent for his adjutant. That officer took me to a neighboring shack and told me to select any bed I desired in a room. The linen on all of them was spotless, but the room was ice-cold. Heating appliances had not yet arrived, he explained. I walked over an irregular field and road to the base hospital from California. A soldier showed me the kitchen. In a small room, a table had been set and I was given toast, jelly, fried ham and all the coffee and cream I wanted. What a meal! I regret that I have lost my little memorandum book and cannot now recall the names of the soldiers, but, if, perchance, any of these young men should see this, they will know that I never will forget their hospitality.

I had breakfast at headquarters and, a few hours later, was assigned to duty with Base Hospital No. 48 and moved over to their outfit. A cordial reception followed. When my baggage was brought from the station and I took out my typewriter and books, a young officer, who assisted me in arranging a large room assigned me, went out without saying a word. About an hour later, he came back all flushed in the face. He had made a writing table with shelves from rough boards. The top was covered with heavy carton. From the commanding officer down, everybody was kindness personified. They asked me to spend the day arranging my room and not to begin work until I was ready.

Wonderful Military-Hospital Organization

The parents and relatives and friends of the two million soldiers who went overseas have, no doubt, again and again asked themselves what would be the fate of their dear ones should they be wounded or become sick.

Frankly, I had little confidence in the medical department as far as the organization and equipment to meet heavy losses is concerned. Not that I doubted the ability of our leaders as organizers, or the skill of the prominent physicians and surgeons who gave up their lucrative practices to serve their country and their fellowmen. But the problem was too gigantic, especially in a country bled white in men and resources by years of untold suffering, to render one optimistic.

As I went over Mars, comparable to a mili-

tary city for the sick and wounded, and that only one of many, as I thought of the many large hotels which had been rented by us for hospital purposes, of the regimental barracks transformed into hospitals, compared with which even our large hospitals in the United States were mere little models, I stood in awe and admiration for the handful of regular army medical officers who were responsible for this titanic product of their organizing genius. Later, I will describe step by step how one hospital is or has been built up virtually over night. I will show also the result of months of toil. And these are mere dots on a huge map!

But, in Mars and similar centers, where forty thousand patients could receive adequate shelter and care, one must pause a bit. Select one of the large semi-public hospitals in New York, Philadelphia, Chicago or other large cities. It may have cost several hundred thousand dollars in ground, building, and equipment. When one of those boasts of a capacity of five hundred patients, we consider it an institution of large size mentioned in the traveler's guides as a city structure worth seeing. In the hospital centers, scientifically equipped institutions with modern operating rooms, with bacteriological and pathological laboratories, with x-ray appliances costing enormous sums, with a capacity eighty times larger than our largest institutions, to serve but one small section of France, were erected in an incredibly brief period on barren ground, devoid of buildings, perhaps mere prairie or agricultural land not under cultivation!

True, we had our resources. We had the funds. The American public subscribing for Liberty Bonds had furnished the sinews; but, money alone would have been useless, especially when one considers under what difficulties we succeeded in transporting across the ocean our troops, equipment, arms, ammunition, medical supplies and what not. Some day, God willing, I hope to give to our people a detailed story on this achievement. Today, I can but touch on a few men to whom the nation's thanks are due, and I say right now that I am doing an injustice to many for not mentioning them, for, like a cog in a machine, each fitted in to secure smooth working. Unfortunately, the frame of my story is too small for a complete enumeration.

[*To Be Continued*]

Surgical Seminar

Conducted by Gustavus M. Blech, M. D.

Further Discussions of Case Problems 1 and 2

NOTE: Since the solution of the first two surgical problems has been given the managing editor, a number of discussions have been sent in. Of these, two are selected for special merit. Though the test may be somewhat weakened by the fact that the diagnoses are already known (a circumstance which will not occur again, since solutions are to be published after an interval of one month, allowing ample time for discussion), the discussions should continue to arouse interest, as a matter of diagnostic exercise.

Case 1 is presented by Dr. Geo. Acheson, Kings County, N. B., Canada, as follows:

I think the diagnosis of gall-stones warranted.

1.—Because of the very large percentage of cases, with or without symptoms, in those approaching or past middle life, especially in women.

2.—Abdominal cramps, lasting from a few minutes to a few hours, and recurring at irregular intervals of a few days or weeks, if not attributable to any other evident cause, *c. g.*, appendicitis, renal colic, ileus, uterine colic, and so forth, most probably have their origin in spasm of the cystic or common duct.

3.—Usually, there are some confirmatory symptoms, *c. g.*, the sudden pain in the right upper quadrant, radiating over the abdomen and especially towards the right shoulder; possibly a chill and some rise of temperature, followed by nausea or vomiting; rigidity of the recti muscles, and tenderness over the gall-bladder; jaundice may or may not be present.

It must be borne in mind, however, that there is such a thing as pseudo-biliary or nervous hepatic colic, occurring in women, which is difficult to distinguish from real biliary colic; but, this pseudo-biliary colic is always associated with fatigue, or some nervous condition, such as emotion, and is never accompanied by jaundice.

Treatment: 1.—If the symptoms point unmistakably to a diagnosis of gall-stones, and a

stone is not passed soon after an attack of colic, surgical means for the removal of the stone or stones, and appropriate treatment of any pathological conditions of the gall-bladder or ducts should be undertaken, especially if there have been repeated attacks; or if there is distention of, or acute inflammation over the gall-bladder.

2.—If surgical interference is not deemed necessary from the urgency of the symptoms, pain and spasm should be relieved by a hypodermic injection of "H. M. C.," or morphine and hyoscyamine sulphate in doses sufficient to produce the desired results. After subsidence of the acute attack, the patient should be directed to take a mercurial laxative, such as calomel or calomel with podophyllin and bilein at least twice a week, and a teaspoonful or more of effervescent phosphate of soda in a glass of water every morning before breakfast. Five grains of sodium succinate three or four times a day should also be ordered. This treatment should be kept up for several months.

Comment

Ad. 1. The point is well taken.

Ad. 2. Agreed, except as to uterine colic. Frankly, I do not know of any such condition. Uterine "cramps" or "spasms" are rather theoretical possibilities, except in case of pregnancy or the expulsion of membrane in the so-called membranous dysmenorrhea (exfoliation).

Ad. 3. At the risk of appearing pedantic, I express my doubt about the existence of a nervous hepatic colic. True, there is such a thing in the literature, and I have in my possession an interesting monograph on hepatic neurosis, written by a distinguished foreign clinician, some fifteen years since; but I doubt its real existence as much as I doubt the existence of nervous dyspepsia, or intestinal indigestion. I know that such a statement is likely to cause bitter resentment or a benevolent smile, depending on the mental make-up of the colleagues, but that does not dispose of the matter.

Supposing the best textbooks to present vivid symptomatology of this class of affec-

tions, and, supposing, further, that we recall to have observed patients whose symptomatology tallies with that given in the textbooks, a case, I claim, has still not been made out.

Space forbids to enter into a detailed discussion, but I will say, for the present, that I am firmly convinced that all of the so-called nervous dyspepsias, that is to say, those of a lasting character, are based on some distinct pathology—usually ulcer.

Until repeated examinations of the stomach contents have been made; until the entire body has been searched by modern methods for foci of infection and until both the stomach and intestinal canal have been subject to a rigid radiographic scrutiny, no diagnosis of "nervous dyspepsia" is even permissible. And, while on the subject, I may as well warn all practitioners that, if they have failed to benefit a patient suffering from this supposed dyspepsia, after several weeks or months of treatment, and the patient suddenly ceases to come, they had better make inquiry for they will learn that such a patient is either continuing to make the round of doctors' offices or, having consulted a specialist, has been sent to a hospital where he is well on the road to recovery. This does not refer to cases which become manifest enough to call for surgical intervention (hemorrhage).

Treatment.—The treatment based on a diagnosis of gall-stones, is of course, excellent. As I have already discussed my reasons for the diagnosis of tubal abortion, I shall say no more.

—

Dr. Raffaele Moretti, of Los Banos, Calif., writes:

After reading in *CLINICAL MEDICINE* the Surgical Seminar, by Dr. Gustavus M. Blech, I felt the necessity of expressing my ideas about the solution of the two cases, as I see them after studying the symptoms. I am very poor in English, but I have done my best.

Case 1.—Mrs. B. Age 44. Required preliminary diagnosis and reasons therefore.

Preliminary diagnosis: Chronic salpingitis.

Even if in the birth of five children she didn't need any assistance (forceps or manipulations), infection may have found its way to the endometrium through the trauma inevitable in any labor process, or into the genital canal. From the endometrium to the tube is the common way of infections in salpingitis.

The temporary relief when treated by curettage, when the patient was thirty-two years old, is natural when we think that it relieved the inflamed uterus; but, the operation failed

in curing the patient because the already diseased tubes were left intact. When, two years after, she suffered from ruptured tube and had to be operated upon as an emergency measure, the finding of free blood in the abdomen and nothing else shows that it was not a case of extrauterine pregnancy, but, in all probability, a case of hematosalpinx whose thin walls ruptured spontaneously. The fact that there was no infection of the peritoneal cavity is explained by the usual sterility of the contents, after long standing.

In the present attack of pain that obliged the patient to be rushed to the hospital, we are confronted evidently with a recurrence of the acute condition in the tube, left at the time of the emergency operation for alleged extrauterine pregnancy. The fact that the present trouble began just with the same symptoms (irregularity of menses) as at the beginning of her disease, shows that probably a new inflammatory process is undergoing in the uterus (endometrium) probably by some material going back from the collection in the tube. For me, the absence of tenderness in the abdomen is not an important finding, because there are many cases of salpingitis that run for years without showing any tenderness on external manipulations.

Treatment.—Removal of all the foci of infection, that is, diseased salpinx and uterus, if conditions are very bad.

Comment

Doctor, your English is not much worse than mine, but your diagnostic reasoning certainly is interesting. So, let us get together for a little fight, all of our own.

You have, of course, a good deal in your favor, if the previous history of the patient is taken into account, for expressing an opinion that this woman has a chronic infection of the uterus involving the tubes. But, when you do not accept a history of emergency laparotomy for a ruptured tube, during which the belly was found virtually filled with blood, and a torn tube plainly betraying abortion, and the opinion of an operator of a ruptured ectopic tube, as proof conclusive of an extrauterine pregnancy, then the burden of proof is on your shoulders to show hematosalpinx.

What causes hematosalpinx? Certain infectious diseases (constitutional) are the principal factors. Certain diseases of the heart, kidneys and lungs may cause hematosalpinx; phosphorus poisoning has been accused and even extensive burns may be responsible. But, whatever the cause, the tubal hemorrhages are slight—ecchymoses.

Pyosalpinx may produce hemorrhages from the tubal wall and the blood will mix with the pus.

Now, when, under such conditions, a tube becomes sufficiently distended to cause pressure phenomena, this condition can be easily detected by examination.

I, myself, have never seen a case of ruptured hematosalpinx, and I can assure you that, in the past twenty years, I have probably operated on as many women as any surgeon in any large city. Even if I grant the possibility of rupture, there will be sufficient warning before that event to cause the patient to seek medical advice and to accept surgical treatment. In such cases, the usual surgical experience is that often one can do a simple conservative operation by which the tube is emptied of its contents and closed. Besides the history of infection, the character of the pains, even when they are intermittent, as is usually the case in the chronic forms of salpingitis, is entirely different from those seen in ectopic pregnancy. Of course, during certain stages of both affections, there is ample opportunity for hesitation as regards the diagnosis, but the picture soon clears up.

In chronic salpingitis, you have annoying pains, often with reflex symptoms or, at least, radiating symptoms (backache, pains in the thighs), the picture is one of chronicity, gradual development, prolonged suffering, gradual weakening, etc. In ectopic pregnancy, the attacks are sharp, threatening, fear-inspiring, producing profound shocks.

With such a picture in mind, I think, my diagnosis of ectopic pregnancy, as the suddenness of the first attack was considered, was justified, as substantiated by later developments.

Case 2

Doctor Acheson writes:

1.—The condition found two weeks after quiescence of an attack of supposed appendicitis is most probably connected etiologically with that attack. The acute appendicitis became subacute, and probably a retroperitoneal abscess has been the result, burrowing up beneath the liver to the diaphragm. The presence of this might be difficult to ascertain by palpation or percussion, and so there might be no evidence of abdominal tumor.

2.—Fluoroscopic examination of the abdomen might assist in making an accurate diagnosis.

3.—The prognosis, provided the abscess, or source of septic infection is reached by operation, and removed or drained, is good; other-

wise it is doubtful, depending on the virulence of the infection, the degree of sepsis, and the resistance of the patient.

4. Surgical therapy: Incision as for appendectomy should be made, and surgical treatment should be carried out according to the conditions found, the appendix being removed, if any lesion exists. If a retro-peritoneal abscess is found, it had better be drained by a counter-opening in the right side between the twelfth rib and the crest of the ilium.

Comment

The entire reasoning of this case is lucid, logical and certainly based on ideas which are sound. In the light of the solution presented, I can only point out that the liver, being pushed low down, should have suggested the location of the suppurative process between the liver and the diaphragm, rather than as a retro-peritoneal abscess.

The treatment is, of course, sound.

—
Doctor Moretti writes:

Diagnosis (probable) cyst (echinococcus) of the liver.

Reading the symptoms in this case, I had the impression that something has interposed itself between the liver and pulmonary cavity or, better, between the liver and diaphragm, pushing down the former and up the latter and with it the base of pulmonary cavity. By reading of the liver margin considerably below the last rib, again came the impression that probably that same thing is now developing at the expense of pulmonary cavity through the diaphragm on account of the great resistance to yield more space offered by superior ligaments of the liver. This immobilization of the diaphragm explains the respiratory difficulty, together with diminished respiratory area by the pressure from below. That the thing must be elastic, is explained by the fact that, in deep inspirations, the line of demarcation between vesicular breathing and any basic noise is lowered, yielding increased space of vesicular breathing. A cyst of any kind developing in the diagnostic surface of the liver will produce the same symptoms. The fact that the diaphragm is inserted all around the thoracic cage at its base explains the absence of any enlargement because, all the other parts being immobilized, any force applied in its center or near the center will cause the points of insertion—movable—to be pulled in the cyst. The commonest cyst of the liver is the echinococcus, and this, I think, is the most probable of the diagnosis in this case by which

we can explain the septic expressions of the face by absorption of its contents.

This diagnosis will be more evaluated if explorative puncture or x-ray pictures would confirm it.

Prognosis is serious, on account of the damage to the liver and the impending danger of rupture into the pleural and pulmonary cavity through ulceration of the diaphragm. The seriousness of infection through surgical removal is also to be considered.

Surgical Therapy.—Immediate removal of cyst, by direct attack, starting the line of incision at the xiphoid cartilage down along the lower rib.

Comment

I certainly congratulate you on having paid attention to the position of the liver. Though I did not have this printed in bold type or in any way to attract attention, it was part of the diagnostic data available, and, as I have shown in the preceding issue, a valuable one.

Now, with reference to your diagnosis. In the first place, echinococcus cyst is rare in the United States. A diagnosis while the cyst is small is simply a physical impossibility and, when the cyst assumes a size to cause trouble, it will produce phenomena due to pressure, the character of which will depend on the organ

pressed upon, *e. g.*, kidney, diaphragm. It is only when the cyst suppurates that the patient has chills and fever.

Pressure on the diaphragm will produce symptoms of cough, embarrassed breathing and anxiety (probably due to pressure on the heart, similar to attacks produced by fermentation in the stomach). The symptoms of threatened perforation into the pleural cavity are terrifying.

But, outside of these symptoms, objective phenomena are essential for a diagnosis, and these refer to the demonstration of a tumor connected with the liver and within the area of liver dullness.

Now, let us say that you locate the cyst sub-diaphragmatically. Indeed, I believe you meant that when you wrote "diagnostic", though I may have misread the word, and, under such a condition, I confess that the differential diagnosis is very difficult. But, the history will help out. In our case, we had appendicitis as a starting point and a rapid development of the trouble; in echinococcus we observe no such sudden phenomena—the development being gradual and slow.

On the whole, doctor, I must compliment you and—*muchas gracias!*

For the next case report and problem see the last editorial on page 642.

MAKE no mistake about culture. Culture is refinement, accuracy, poise, resourcefulness; it is not effeminacy, weakness, conventionalism, impracticability. We have been getting too far away from the humanities, from classical education, from academic scholarship, if you please. In the quest of science—and there is no nobler pursuit—we have set up utilitarian courses, called premedical and certainly premeditated, for the purpose of reducing to a minimum all those things which do not bear directly on the matter in hand, and swelling to a maximum those that are concerned in the material things of medicine. In this we have left out the very bed rocks of learning; the capacity to interpret the phenomena and the power to express the findings.—HUBERT A. ROYSTER, M. D.

The General Practitioner

Talks About Professional and Personal Problems

Conducted by WM. RITTENHOUSE, M. D.

"Genussmittel"

THERE are some people who try to be orthodox and puritanical in regard to diet, just as others are in regard to religion. They have the type of mind that tries to adjust everything by theory. Some of them go so far as to condemn all foods and drinks that are taken merely for pleasure, and maintain that we should eat and drink only what is nutritious, even if not especially pleasing to the taste. That would make eating a purely utilitarian affair, at times even disagreeable.

I once visited an institution where sick people were treated solely by bathing and dieting, and the latter was planned by the management according to scientific rules, as they claimed, but rules that were founded on theories which, to say the least, were open to doubt. To me, it seemed that the main object was, to exclude almost everything that is pleasing to the taste. The idea, that the sense of gustatory pleasure might play a useful part in Nature's plan regarding the selection of food, seemed to be entirely ignored in that institution.

The Germans have a word, *Genussmittel*, which literally signifies "means of enjoyment" and is commonly used in the sense of "luxury". But it is also used to designate articles of food and drink which are not, strictly speaking, nourishing, but which add to our enjoyment of food and thus contribute to our physical welfare. It is in this latter sense that I am considering the word.

Under such a classification, we may place tea, coffee, alcoholic beverages, salt, pepper, and other condiments. Closely related are also the following: (1) variety of food; (2) the manner of preparing and serving food; and (3) mental and psychological conditions during a meal.

It is pretty generally conceded that variety of food, whether in the long run or at a particular meal, is essential to secure the best nutrition. Dietetic theorists have argued that animals thrive on an unvarying diet, cattle

and horses, for example, living on grass or hay from one year's end to the other. Even if we admitted this for the sake of argument, we must not overlook the fact that, in many respects, our habits must differ from those of animals and that we cannot take their example as a guide for our conduct without a good deal of modification.

But, observation shows that, when animals live upon a single kind of food, they do it not from choice but from necessity. At times, they show a very eager desire for a change of diet. Most of us have observed how greedily horses and cattle, after a winter on hay, seize upon the first opportunity in the spring to get a mouthful of grass; or how eager city horses become for it. We are sometimes annoyed because they nibble at the grass-plots in front of our homes, but we are inclined to forgive them when we see how longingly they eye them. I recall an amusing instance that occurred before the days of automobiles. I had driven out to a suburb to see a patient, one day when the country was "knee-deep in June". I left my mare anchored on a prairie where the grass was plentiful, while I made my visit. She devoured the new grass with a zest that was delightful to look at. The next day, and for some days after, as I drove about the city, she tried whenever she came to a corner, to turn in the direction of that suburb where lay the much desired feast; and if, by chance, I happened to drive in that direction, she immediately began to trot as fast as she could go,—a burst of speed that at once lost its enthusiasm the moment I turned her in some other direction. Animals do not like a monotonous diet any more than we do. They are merely unable to put into words their desire for a change.

The farmer finds by experience that a varied diet is beneficial to his stock. His horses can do more work and keep in better flesh if, in addition to hay or grass, they are given oats, corn, mill-feed or carrots. It is a real pleasure to see the solid satisfaction of a horse munch-

ing a meal of carrots or of cabbage.

Cows give more and richer milk and look sleeker, if they have ensilage, pumpkins, turnips, mill-feed or oil-cake to vary their diet of hay or cornstalks.

The value possessed by variety is in part due to the fact that different foods contain different amounts of vitamins, proteins, carbohydrates, etc., and thus the lack of one kind is supplied by the excess in another.

Still, I am inclined to think that the psychological side of variety in food is also quite important. We are so organized that monotony in anything has in time a depressing effect. I am reminded of the schoolboy who, when asked to define "polygamy", said it was the custom of having several wives at the same time. Then the teacher asked him for the word that described the custom of having only one wife. He replied promptly, "monotony". Is it not possible that he was more nearly correct than he realized? The great frequency of divorce may be due to monotony in a greater degree than is generally supposed! Mankind is a good deal like the horse in the clover pasture looking over the fence at the bluegrass. The thing we have, seems less desirable than the thing we have not.

The effect of monotony in food is well known in farm life. I remember that, in my boyhood, during spring and summer almost our only meat was smoked ham and bacon. Cured with salt and beechwood smoke, it was delicious—far superior to the half-cured stuff we can buy today. And, yet, when we ate it every day, week after week, and month after month, we almost came to loathe it; and we hailed as a godsend the occasional opportunity to get a bit of fresh meat, fish or wild game. In the early sixties of the last century, we used to see the extraordinary migration of the passenger pigeon, when they flew in millions, covering the sky from horizon to horizon. It was such a treat to us on the farm to have pigeon stew, pigeon pie, and roast pigeon, that we kept the family shot-gun ready loaded in the field where we were at work, so as to be ready for a flock whenever it came.

A few years later, it became a favorite sport to eat pigeons on a bet. A sportingly inclined man would lay a wager that he could eat 30 pigeons in 30 days. Some would succeed in going through with it; but, quite often, the loathing and disgust became so great before the thirty days were up, that the eater gave up his money rather than bear his punishment.

Even the strongwilled fellow, who was determined not to yield, would sometimes find that his stomach was unable to retain the food forced upon it and would prove to its owner that nausea is stronger than the will. It was like the sea-sick Frenchman who, when asked whether he had dined, replied, "No, Monsieur, quite the contrary". What was it that made the difference between the farm boys' relish of the pigeon, and the sports' disgust? Simply monotony.

The desire to avoid monotony even at a single meal has given rise to a custom that is almost universal in civilized life—namely, that of taking our meals in courses, the number varying greatly according to taste, financial resources and other circumstances. The European peasant may limit his meal to a piece of black bread and a handful of olives or a piece of sausage. In our land of plenty, most of us want, even for the simplest meal of the day, breakfast, at least three courses, such as fruit, cereal, and bacon and eggs or ham and eggs. When we want to demonstrate what we can do if we really try, we sit down to a twelve-course dinner, with five kinds of wine, and finish up with a pony of brandy or a liqueur, and black coffee. That is, of course, going to an absurd extreme of folly and self-indulgence. It is the abuse of a principle that is perfectly sound—that a reasonable variety of food at a meal is conducive to enjoyment, to good digestion, and to good health.

So, we are merely following a law of nature when we endeavor to secure variety in our food; and I believe that we are doing the same when we add to it some things (that have little or no nutritive value) for the purpose of increasing the flavor of the food and our enjoyment in eating it. For, it is a fact abundantly proven by experience that food which is pleasing to the taste is more readily digested, other things being equal, than food that lacks relish. To add seasoning to food, is perfectly justifiable; it is solely the abuse of these things that is reprehensible. The person who has so perverted his taste that he cannot, or thinks he cannot, relish his food without adding large amounts of condiments, pepper, salt, sugar, pickles, chili sauce, Worcestershire sauce, etc., is going to extremes for which he is sure to pay the penalty sooner or later.

The true course in this matter, as in so many others, is to take the golden mean between the two extremes. If people could, or would, only learn the meaning of the expression "Health by Good Living", how much they

would add to their enjoyment of life and to their length of life! Men act as if good living meant gormandizing. To indulge the sensual pleasure of gross appetite for food and drink, during the brief hour of a mealtime, and then spend the rest of the twenty-four hours paying the penalty, to say nothing of shortened life, is truly to live in a fools' paradise. This is the more true, as the taking of food wisely, temperately, and intelligently can be accompanied by just as great gustatory pleasure as the sensual way, and it leaves no sting behind.

—
Moderation, then, is the great desideratum to be observed. When I am asked, as I continually am, "Will coffee hurt me? Is tea injurious? Does salt hurt the kidneys?" and a dozen similar questions, my reply is, "That depends upon yourself". Any person may have an idiosyncrasy against some particular thing, so that even a small quantity is injurious. An occasional individual cannot take even a little weak coffee without harm. But most people are benefited by taking with their meals some mildly stimulating warm drink like tea or coffee, provided it is not strong. The moment, though, that you reach the point where you cannot relish it weak, when you want it strong enough to brace up the nerves, then you would do better to drop it altogether. The person who must have his tea and coffee strong, has begun to be a slave, and must later pay the penalty, or, to speak more correctly, those around him will pay the penalty. For, shattered nerves are usually quite as trying to those who come in contact with us as they are to ourselves. If the "tea-granny" and the "coffee fiend" only hurt their own nerves, it would not be so bad. But, as one of our well-known cartoonists says, "There's one in every office".

—
The manner of preparing and serving food has much to do with our enjoyment of it, and the benefit we derive from it. A careless cook can spoil the best of food and, no matter how well it is prepared, if served sloppily it is robbed of much of its attractiveness. Even the serving of too large a quantity to a convalescing invalid may have the effect of causing his capricious appetite to revolt. One of the most valuable accomplishments of a trained nurse is the ability to prepare and serve food daintily and in an attractive manner. In this matter, the psychological factor is prominent, but it is not less important on that account.

An acquaintance of mine had a favorite restaurant, and she took pleasure in boasting about it to her friends. This was in the days before food inspectors had accomplished anything in improving conditions regarding the handling of food in hotel and restaurant kitchens. One day, she was with a party who were inspecting restaurant kitchens, and among them was her favorite eating place. What she saw there, put an end to her praise of the place. It is probably conducive to our peace of mind (and stomach) that we do not see too much of the way our food is handled from the time it leaves the farm till it reaches our tables. It may not be true that the Chinese cook moistens the pie crust with water held in his mouth, nor that the Greek fruitseller uses saliva to rub his apples to the proper degree of polish, but there are things happening in the family kitchen, sometimes, that cannot be discussed as too improbable to be true, when that important part of the home is in charge of an ignorant emigrant from Europe. It is an indisputable fact that there are such persons as "typhoid carriers"; it is equally indisputable that such persons acting as cooks in homes have given the disease to members of the family; and it is just as indisputable that such infection is impossible except by gross and filthy carelessness on the part of the "carrier". We know that the germs of typhoid are developed in the intestines, and it does not require a herculean effort of the imagination to figure out the only way by which those germs could make the journey from the intestine to the food—a way too nasty to describe. A housewife does well to keep her eyes open to observe whether her cook is careful about washing her hands before handling food.

I once delivered a baby in the home of a foreign family. According to a well-established custom, they washed the baby in the dish pan! They very hospitably urged me to stay for breakfast. I passed.

Mark Twain in "Innocents Abroad" tells of ordering luncheon in a Turkish restaurant in Constantinople, where the cooking was done in the presence of the customer. The first course was sausage meat, which was cooked by being moulded on to an iron skewer and then held over the glowing coals. The meat became the object of disputed ownership between the cook and a sad-looking dog, and possession had been exchanged several times between the two, the cook finally triumphing and placing the appetizing morsel before the hungry customer.

But, for some reason, Mark decided he didn't care for sausage, and ordered fried eggs. While they were frying, the cook stood pensively prying fragments of his last meal from between his teeth with a fork, and then used the fork to turn the eggs! The hungry customer was hungry no longer. He paid his bill and passed out.

Then, there is also a psychological influence upon the appetite independent of the food itself, which is due to mental states induced by external causes. It is well known that sudden grief or anger may take away the appetite completely. A hungry man may find his appetite suddenly spoiled by the insolence of a waiter or by some untoward occurrence, such as a quarrel in his presence.

During the war, there was a considerable period during which the food shortage was made an excuse by a certain type of profiteering restaurant and hotel proprietors to serve such ridiculously small portions of food as to be utterly unworthy of the name of a meal, while the price was increased instead of diminished. During this time, a friend of mine took his wife into a restaurant of good reputation, for luncheon. They ordered fish. When it came, they saw on each plate a little morsel, hardly a mouthful. He protested, but the waiter said that was the usual size of an order. He asked for the proprietor, who was profuse in his apologies, ordered the waiter to take the plates away and bring two other orders. When they came, they were exactly the same size! The proprietor's apology had simply been a studied insult, veiled under the guise of politeness. My friend was so angry that his appetite was completely gone.

On the other hand, the effect of sociability and pleasant surroundings, is to promote both the enjoyment of a meal and its digestion. Eating alone is ever an unsatisfactory procedure. Eating with those we love increases social enjoyment and also the value of the food. One is reminded of Macbeth's welcome

to his friends at the banquet: "Now good digestion wait on appetite, and health on both!" which Dr. Bucknill called "a sort of physiological grace before meat."

Although we need not live to eat, yet, while we eat to live, we are justified, even in duty bound, to make eating as pleasant a procedure as possible, because that is the road to health.

In conclusion, if any person thinks that he can cure himself of indigestion or any other ailment by depriving himself of nearly every article of food that is pleasant to the taste, he is probably doomed to disappointment. He is much more likely to succeed if he reduces the usual quantity of his food, while recognizing the value of tastiness. Individual idiosyncrasy plays a large part in the matter, of course, and not everything that tastes good is wholesome. But, persistent observation of the effects of various articles of food will enable almost every one to select for himself a diet that will be conducive to health and yet so agreeable to the taste that eating may still be a pleasure. Eating slowly and masticating one's food to the condition of semifluidity is a great aid in getting its flavor; it is also of the greatest help in keeping down the quantity; for the appetite becomes satisfied before the stomach is overloaded.

We are a nation of rapid eaters, because we do everything in a rush. In urging patients to eat slowly I am often met with this reply: "Doctor, I try, but I keep forgetting and swallow each mouthful too soon". The remedy for that is to take *very small mouthfuls*. If these are chewed until no pieces can be felt with the tongue, the habit of slow eating *can* be established. Of course, it takes perseverance; but so does every good habit. Some one will rise to remark that that is Fletcherism. So it is; but what does it matter what we call it, if it helps? Thousands have been restored to comfort by Fletcherism. Those who do not need it, do not have to practice it.

2920 Warren Ave.



Good Medicine

Let us learn as we go, but not forget what we know

Conducted by GEORGE H. CANDLER, M. D.

SLOW DOWN: DANGER!

WERE it not for the fact that, when I endeavor to draw something, infants laugh boisterously and older people look at me with pity and suspicion, I would present you with a cartoon which would at a single glance enable you to comprehend just exactly what is the matter with the "American peepul" today. For, that something is the matter is, of course, admitted by every one of the "peepul" observing the behavior of their fellow beings. Not a single soul I meet fails to express, sooner or later, a mild wonder as to "what will come next?", "where are we going to land?", or "what will become of us?"; and, while it is easy enough to tell what will inevitably (ultimately) become of us (or what we will become), it is not by any means a simple matter to tell what will "come next" or *where* we "will land"—WE ARE GOING TOO FAST for for conjectures to have much value. It is reasonably certain, however, that the landing will be rough enough; for, the faster one is going when he *hits*, the fewer the fragments sympathetic spectators are able to gather up and turn over to weeping relatives. Not, of course, that it is of any particular moment to the defunct speedster himself whether he goes home reasonably whole or in small segments; but, it is somewhat unpleasant for those who are left to have to journey to the cemetery and plant flowers over somebody's left foot and a piece of the *os innominatum* and realize that the rest of that beloved anatomical structure has been scattered over a half square mile of uninteresting landscape!

The picture is gruesome enough when dealing with the individual, but absolutely appalling when one paints in whole families, communities—nay, even the great mass of "the peepul"—dashing themselves with "irresistible speed" against that "immovable body", NATURAL LAW. The result is almost too squashy and segmentary to bear contemplation, but some leisurely thoughtful souls will be saved to shudderingly contemplate the final catas-

trophe and it is reasonably safe to infer that they will profit by the lesson and, after the necessary obsequies, begin to build another social structure in which unnecessary celerity will be positively *verboten*. Then, again, life may perchance be really worth the living.

As it is *now*, our first name is HURRY and our Surname SPEED. Our slogan is "Let's Go!" and the mottoes on the apartment wall "Grab and Ye Shall Get", and "STEP ON THE GAS".

And, if you don't "grab", and "get" (away with it), you're surely a goner! It is the unwritten law today that you must either take other people's dust or "speed up" and give them yours—and you're a bum driver if, in the endeavor to get ahead, you put on brakes to avoid the weak, contemplative or flat-footed who happen to get in the way. If you chance to go down, the dirty little Henry or more opulent Loco behind will go over your prostrate form without a cylinder missing and the driver withdraw his gaze from the road ahead only just long enough to assure himself that no fragment of your osseous structure punctured his tire. THAT would be serious! There is absolutely NO SPEED LIMIT (and little consideration) on the Road of Modern Life and the man who gets over it fastest reaches the cemetery soonest. There is, perhaps, a grain of consolation in that fact for the "poor nut" who prefers to proceed leisurely along and commune with Nature as he goes.

To make sure that you *shall* be a strictly up-to-date speeder, they have a brisk sterilized doctor and fast-working nurses bring you rapidly into the world in a nice white enamelled Maternity Room on the 'teenth floor of a populous hospital. No sentiment about that procedure, my boy; you're just *due* and have got to be delivered and TIME is money—and Landlords do NOT like storks cluttering up their chimneys. So, you just have to start without the restful HOME atmosphere, and you'll be unusually lucky if you get more than a breath or two of it till the time comes for

you to say *Vale* in almost the identical surroundings! For, you must also understand that it is very very unpleasant to other people to have the Grim Rider on his ridiculous antique White Horse pottering about the halls of those delectable community-dwelling places known as Apartment Buildings—or, if particularly low-priced, as “Flats”—in which, when they’re not “going” or “getting”, most of the SPEED family of today “move and have their being”.

On leaving the place where you were born, Mother, naturally desiring to return as soon as possible to her “social duties”, hurries you away from the maternal fount to a bottle and, spurred on by the fact that “those horrid Smiths’ baby weighed fourteen pounds at three months” feeds you therein various fearful and (alleged) fat-forming compounds (usually with a dash of orange juice and “vitamines A and B”) which clog your little intestine and produce large quantities of gas. Then comes the internist and gives you oil. He also orders “more water”. Thus, at the very outset, you become familiar with those three great essentials, GAS, OIL AND WATER—without which you will never be able to run. Your fond father also discovers the fact that gas in the infantile tummy costs more than it does in the tank. About every evening, you are bundled up in a most “hygienic” (?) water-proof rubber contraption and taken out to become familiar with Nature in the family “bus.” If you belong to the real A. I. Automotive Speed clan, you are suspended in a swing cradle or little fixed cage behind the front seat so that your infant ears may be soothed by the sweet music of a thousand honking horns and your pink, tender lungs toughened by the intake of exhaust gasses and road dust. To be a success, you *must* be “broken in” young. You *are!*

If your parents go far, you must also be “fed on the fly”. Nice partly-churned milk in a thermos bottle is given you and the churning process is finished in your little interior. As you’ll most likely have more or less enteritis later, it is just as well to get your intestine used to working under any conditions. Still later, when you have four teeth and can say “car” with reasonable distinctness, you’ll be taken on all-day outings and get ice cream cones, bites of “hot dogs” and salted peanuts. You’ll also subsequently get various medicinal preparations including oil—plain petroleum or Castor of higher viscosity as may be necessary to remove carbon deposits from your cylin-

ders. As soon as you get big enough, you’ll receive a push-mobile and be given the freedom of the sidewalks in your immediate vicinity. Nervous old ladies will afford you a great deal of enjoyment and you’ll have a perfectly wonderful time colliding with the other kids’ vehicles—and adult shins. Within a few months, you will be able to shoot in and out between the legs of staid burghers and skin baby buggies by a hair’s breadth. By this time also, you will probably have acquired a strong contempt for the “walking classes” and, sitting beside father, when he drives THE car, will urge him to “get” dogs, chickens and “goobs” who think they own the streets. At school, you will, of course, consort with fellows whose people drive cars “priced at over \$900” and it will be your greatest pride to be seen with “Stuttering” Stutz, whose brother “always drives at forty” and has been arrested three times—once for running into a hearse.

—

Years will slip by like telephone poles on a cement road, and we will next find you taking some “skirt” out for a little evening spin. If Dad has “gotten” as he went (even if with a “gat”), you may do this thing in a “low, rakish speedster” of your own. Naturally, then you will have many spins with many “skirts” and “have it” entirely over the less rapid Speeds who are limited to the use of the “old family can” one night a week. To such poor boobs may come the appeal from flapper friends to “show some speed, kid!”, or “step on’er, Clarence, that old flivver is passin’ us!”; but, to you belongs the supreme joy of horn-ing handsomely through traffic, swinging round corners on two wheels and burning up the road re-gardless. Your girl must learn to wear the “speed face” and bestow only a supercilious sneer on those who get your dust. A year or two of this and the pace and your bringing up begin to tell. Your nervous system is frazzled, your digestion uncertain and you “crave action”. You want what you think you want in a hurry, and when you get it you find that you really wanted something else. You have had no time and now have no desire to analyze yourself, the people you associate with, or enjoy the beautiful things which surround you. You have been “stepping on the gas” and giving every one else your dust so long that you have become selfish: You are the only thing which interests you. If other people want what you have, or would take, let them beat you to it—if they have

speed enough. Otherwise, let them take the ditch!

As there are very, very many of your kind, clashes on the road, in love, in business and elsewhere, are frequent and result either in a disastrous smash-up or a victory for the fastest worker. For the one defeated (if not entirely knocked out), there is nothing left but to get something a little bit speedier than the other fellow's and try again to give him "the go-by".

And, so you proceed, finding comparatively early that SPEED means not alone the expenditure of much money but the destruction of the most perfectly-constructed machinery. The greater the Speed, the more certain and rapid the breakdown. Until entirely too late, however, you may fail to realize the more important fact that, beside, material SPEED destroys vital things—the very best things of life—and inevitably brings with it UNREST, Discontent, Disillusionment—and, very frequently, DEFEAT, DISGRACE and DEATH.

It is reasonably safe to assume that, if the majority of the inhabitants of a country become speed maniacs, the Nation itself will be vertiginous. It is! When each individual begins to shriek "Let's Go!" and "steps on his gas", something certainly will "go" and a whole lot of the steppers, to say nothing of innocent bystanders, will get severely damaged. Indeed, they are getting damaged at this very moment, but such casualties are trivial compared with those which will follow any continued acceleration.

Since the beginning of civilization, there has been an ever-growing recognition of the fact that the truest form of personal liberty lies in proper recognition of the rights of others and practically all changes which have been beneficial to the people as a whole have been brought about *slowly* and, usually, by united effort. The Speedster and "Go-get-iter" believes that personal liberty consists of giving the other fellow his dust and "getting his" entirely regardless of the welfare of his neighbors and, while he may be nothing more than a nuisance to be suppressed when in the minority, he becomes a fearful menace when omnipresent both in low and high places.

And can it be denied that the people of this Glorious Country have been speeded-up and commanded to "go get it" by masters of the art until most of them now think they MUST "Go"—MUST "GET IT?" Hasn't this SPEED

mania brought about UNREST, DISSATISFACTION and is there not grave danger of DISILLUSIONMENT, disbelief even in the integrity of our Institutions, our social fabric?

Are not the signs portentous enough to make us all put on the brakes and let the dust settle a bit before proceeding?

There Is a Dangerous Crossing Ahead: Slow Down!

And that means You—Senator or Street-car Conductor; Banker or Bunker boy; Financier or Farmer; Manufacturer or Mechanic—every worth-while American Citizen who enjoys his personal liberty to the utmost just because everyone else is assured by our Constitution the same protection! If you'll stop, the regular traffic cops will mighty soon put the rough-necks in little red rackets where they belong and then, in a short space of time, traffic will flow smoothly along as of yore and we shall have time not only for the ordinary amenities of life but some leisure to re-familiarize ourselves with the domestic virtues (they *have* been neglected) and enjoy the countless things of beauty which lie all about us on the wide, wide road which starts at the cradle and ends at the grave. SPEEDING along this, we see few or none of these things; but, goggled, self-centered and soulless, we streak along to whatever destination we have set for ourselves—oblivious of the injury we may inflict as we go and utterly forgetting that the end of the road MUST be reached ultimately by every human being. And Rolls Royce and Flivver are on a parity there.

What's to be gained by excessive SPEED?

Slow Down and Live as you travel.

And let the fellow in the other car have his share of the road.

Criticize But Also Contribute

Doubtless, because he loves us—because he believes (erroneously, alas!) that, hidden somewhere, we have a reasonable amount of intelligence and ability, a highly-esteemed correspondent recently verbally flayed the staff of CLINICAL MEDICINE alive. A kindly fate led him to address his criticisms directly at the Managing Editor; but, towards the end of his epistle, he mentioned the unhappy conductor of this department by name—nicely, it is true—and so he ought not to feel surprised at an answer appearing on this particular page.

The gentleman informed us, in the very first paragraph, that he intended to "throw bricks"

(lots of 'em) not bouquets, being moved to such action by the belief that, if we would "get out of the rut" and really *try*, we might produce a readable medical journal; something entirely different to the tiresome "all-one-brand" periodicals emanating from other sources. Indeed, of the "fifty-seven varieties", with which he was familiar, he seemed to regard ours as offering the most numerous and welcome gleams of intelligence; faint, perhaps, but still observable.

But, having thus tickled us pink, what he said about our shortcomings was pointed, pungent and purple. Moreover, unfortunately, *some* of it was TRUE and that is why I, at least, feel like mixing it up with him for three rounds and then, after having loosened two of his best front teeth and inflicted reasonably obvious injuries to his orbits, shaking him by the hand and inviting him to a certain basement restaurant I know of to dinner, etc., etc. Unless a man wants a real fight on his hands, he should not throw raw truths at any one. Neither should he urge the Editors of *any* journal to do such an unusual and uncomfortable thing as "upholster your chairs with mustard plasters." Where does he think their brains are? *Fundamentally*, perhaps, the idea might work (indeed, I will admit that there are Editors who might find a *capsicum* cushion beneficial); but it can not be applied to *Us*. We cerebrate on a higher plane! Indeed, when we *do* think, our thoughts really run very much along the same lines as our captivatingly candid critic's. He objects strenuously to any space being given to dietetics. Nine-tenths of such articles, he thinks, are "bunk." Selah! He said it. BUT, how much space does CLINICAL MEDICINE give to this subject? Not a *very* great deal. Again, he tells us that we should present "short, practical papers upon the Treatment of Disease"—not theoretical theses. Again, I agree with him. I abhor theses; I had to write one once. The trick, however, is to get practical men to produce the papers! Most of them are practicing so practically that the only things they have time to write are receipts and recipes, or (occasionally) something favorably known to the laity as, a "little prescription". Moreover, while the average practical man is not at all averse to gathering as he goes practical point-

ers from someone else, he seems to hate to shed any really useful and unusual information he may have acquired by his own hard work and keen observation. As he gets about ready to relinquish his practice, he may "loosen up", but, alas, by that time, someone else has probably discovered that the whole theory upon which *he* worked was erroneous and that the pathological condition he "treated so successfully" never really existed. What is "practical" today may appear almost ridiculous directly. Only the recognition of this stern fact keeps me from writing half a dozen "practical papers" every month! As it is, I most sincerely wish half a dozen other more capable men would each write *one*, and I can hardly control my soul with patience till we receive the initial contribution of the CRITIC himself. Under the circumstances, HE just *has* to come across with the "copy" and, after that "mustard plaster" remark, he knows he'll have to write "tall and wide." We've something to look forward to!

Confidentially, I might state that it is not an easy matter for any small group of men to themselves turn out, month after month, for years, "strictly practical" medical articles which would be worth reading once, to say nothing of preservation for future reference or study.

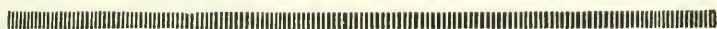
The Editors can—and must—do much personal work to make a journal acceptable to its readers; but some of those readers should themselves contribute the very best that is in them if anything like perfection is to be attained. Therefore, I venture to suggest that those who constructively criticize, should now and again also contribute the kind of material they would like to read.

THE AMERICAN ASSOCIATION OF ORIFICIAL SURGEONS

The American Association of Orifical Surgeons will hold their annual Convention at the Lexington Hotel, Chicago, Illinois, on September 28, 29, 30, 1922. The Clinic that is held in connection with it will be held at the West End Hospital, Chicago, from eight in the morning until twelve of the above dates. The Association meetings afternoon and evenings. Make your plans NOW to attend these meetings. Do not forget the Time and Place.

W. E. KINNETT, M. D.,
Peoria, Illinois. President.

Let's Talk it Over



The Eclectics and the Concentrated Principles

AS I read medical history, the Eclectics barely escaped becoming the original active principle therapists of America.

As early as a third of a century before Burgraeve had built up his wonderful system of Dosimetry, the Botanics, Thompsonians, Eclectics, and various other "reform" fragments, out of which the modern Eclectic school of medicine has slowly developed, had begun to realize the need of smaller doses of more concentrated and less unpleasant remedies than were then in common use by physicians of any class or school; and many of their leaders were diligently searching for such remedies and for a system of medicine around which they could rally the various heterogeneous elements which were united only in opposition to the "dominant" school. Despised and rejected though they were by their "regular" neighbors, who looked down upon them as quacks and ignoramuses, it must be admitted, at this day, that these elements as a whole were, after all, an important factor in bringing about some much-needed improvements in medical practice.

In 1835, when hardly more than a baker's dozen of the alkaloids had been discovered, and only two or three of these were in common use, Dr. John King, a young Botanic physician of New York City, who was also an educated gentleman, stumbled by the veriest accident upon a simpler and more satisfactory method of precipitating and separating out the resinous principle of certain crude vegetable drugs than had previously been known, though others had made abortive and unsatisfactory efforts in the same direction. In his account, of the manner in which he was led to make this discovery, he says:

"Knowing nothing of this resin (of podophyllum), an attempt was made to prepare a hydroalcoholic from some forty pounds of coarsely powdered podophyllum root. A portion of the alcohol having been distilled over from the root

tincture, water was added to the remaining tincture, the intention being to evaporate this diluted tincture, so that a hydroalcoholic extract might be had. But, night coming on, the process of evaporation was postponed until the following day. On the next morning, when stirring the cold mixture, numerous pieces of a dark, somewhat porous and rather brittle body were found in the fluid. Many were the surmises as to what they were, and the query arose as to their value, if any, as a medicinal agent".

Just at this time, a young lady who was present complained of feeling ill. Without any knowledge of the nature of her illness or any idea of the intense activity of the substance he was dealing with, but thinking, apparently, that this would be a good opportunity to test its properties, he dealt out "about 12 or 15 grains" and administered it to her, dismissing the case from his mind. An hour later, his attention was urgently called to her condition, and he was much surprised to find her suffering severe pain and great distress, with cramps in the stomach and extremities, small and feeble pulse, and cold extremities, with excessive vomiting and purging, and apparently sinking rapidly. Much alarmed, he rushed out to secure the assistance of some of his professional brethren; but, as none of them could be found, he was obliged to fall back on his own resources; which he did by administering alkalies and applying sinapisms and hot formentations. In due time, he had the pleasure of seeing her restored to her usual health.

Years afterwards, Dr. King declared that a princely fortune would not induce him to undergo a repetition of such a condition. It is safe to assume that he was ever afterward a more cautious man for this experience. Nor is it strange to find him inclined to favor small doses frequently repeated. When you come to think about it, there is a considerable resemblance between Dr. King's advice "to give medicines in the least possible doses that may be

found necessary to keep the system constantly under their peculiar alterative, tonic, or other action"; and Dr. Abbott's aphorism, "The smallest possible quantity of the best obtainable means to produce a desired therapeutic result".

Dr. King's method of separating out the resin of podophyllum was described by him in these words:

"I obtained only the resin, by extracting all that the alcohol will take up, then filter the alcoholic tincture, to which I add an equal amount of water, and separate the alcohol by distillation. The resin sinks in the water".

By similar methods were obtained the resins of macrotys, jalap, leptandra, and considerable number of other drugs, many of which were soon forgotten. These four, however, remain the leading resinoids to this day, just as morphine, quinine, strychnine and atropine remain the four great alkaloids.

Dr. King insisted that the proper method of naming these resinous principles was as the resin of podophyllum, macrotys, jalap, and leptandra; but the commercial interests cried out for a shorter and simpler way, even though it was not scientifically correct. In the end, the commercial interests had their way, and nearly all the concentrations, whether resins, resinoids, glucosides, neutral principles, or what not, were denoted by the termination *in*, added to the root name of the crude drug; thus, podophyllin, jalapin, etc. Dr. King always opposed this usage and, though compelled to recognize it in practice, he did it grudgingly, as, when he speaks of "a new drug, to which the name of podophyllin has been given."

The time was now ripe for new remedies. The concentrated principles were in everybody's mouth, both literally and figuratively. Soon, an increasing number of firms and individuals was engaged in the manufacture of these various preparations known as resins, resinoids, neutral principles, all with names ending in *-in*. In the late fifties, no less than eleven firms were engaged in this business on a commercial scale. The majority of these were in the middle west, with Cincinnati as the center; and this city is still the center of the Eclectic school of medicine, having two of the best firms of manufacturing pharmacists, together with the leading Eclectic college and the standard Eclectic medical journal in the United States. Each of the manufacturing firms in question—Wm. S. Merrell & Co., and Lloyd Brothers—had its origin at the period of which we are speaking, though not by its

present name. In the east, perhaps the most commonly known firm was that known as The American Chemical Institute, and afterwards as B. Keith and Co. They were still operating as late as 1910, and some of their preparations can still be obtained in the market. Another firm then established and still doing business, though perhaps not in quite the same line, is that of Tilden & Co., of New York.

J. U. Lloyd states (see *Bulletin No. 12* of Lloyd's Library, from which most of this information is obtained) that, in 1851, Dr. William Elmer, of Auburn, N. Y., went to Syracuse, N. Y., and formed a partnership with Dr. S. H. Potter, who had just established The Syracuse Medical College. There he associated with himself Dr. John T. Goodin of Utica, Dr. Dwight Russell, Dr. Sears Crosby, and Dr. Alexander Wilder, the project being to open the American College of Pharmacy, which, however, was merely a pretext for an alkaloid, resinoid, concentration business scheme." This college of pharmacy went on manufacturing podophyllin, macrotin, and leptandrin, until midsummer, when it collapsed.

The above-cited paragraph is of special interest to me, because of my personal acquaintance with one of the persons mentioned, Dr. Dwight Russell, who came to Milford to practice medicine in 1855. When I set foot in town 28 years later, he was one of its leading practitioners, with whom it was my privilege to be on the most friendly terms until his death, in 1894. I bring it up here for the sake of paying a deserved tribute to one of the leading Eclectics of this section, of whom Adin Ballou, in his "History of Milford," says: "Dr. Dwight Russell is a man of strong mental powers, ample scholastic acquirements, much experience, and holds the front rank in his profession in town". I found him an open-minded man, a good physician, and a true friend. He was the first physician to call my attention favorably to the Metric Granules (I do not recall the name of the manufacturer) which were either the forerunners or the early imitators of the alkaloidal granules of Abbott. So, although he was himself an Eclectic, I may say that he introduced me to Alkalometry. It is altogether probable that his favorable impressions of the metric granules was due to his own earlier experience with the Eclectic concentrations.

But, now, or about this time, there came a new element into the relations of the Eclectics to the concentrated principles. Their school was a so-called "reform" school of medicine (and I do not know but that I might in fairness omit the "so-called"; for, I believe that

they did their share in bringing about a real reform in the practice of medicine) and it was chiefly advocated, maintained, and made use of by the plain people who were largely attracted by the cry of reform, and also perhaps by the idea of remedies made from American-grown plants. At this time, King and Scudder were perhaps the most prominent leaders of the school, both able men, and men of convictions. They took strong ground against the use of poisonous drugs, heroic dosage, and the alkaloidal (or, more properly, concentrated) medication theories which were then gaining a strong hold upon the school. Keith, the manufacturer of concentrations, soon withdrew from the Eclectic fold, and thereafter his preparations were sold more largely to the members of the regular school. Merrell and the Lloyds, on the other hand, worked consistently with the Eclectics and, by their efforts, contributed much to the success of the movement. King was already the author of that monumental on plant remedies, the "American Dispensatory," which still is the standard work of its kind. Scudder had for some time devoted himself largely to the development of the theory and practice of "Specific Medication", and that to such good effect that it was soon accepted as the standard of the Eclectic school. Not only this, but his ideas were taken over in greater or less degree by many of the younger members of the regular medical profession and especially by the medical students. I well remember that a good proportion of my own class in the medical school owned copies of Scudder's "Specific Medication" and quoted its opinions with favor when they were by themselves. As for myself, I still keep a copy of this work, and its companion, "Specific Diagnosis" (bought in my schooldays) on a convenient shelf in my library and refer to it frequently.

So it came about that the teachings of Scudder were accepted, after a time, both by the more progressive and the more conservative of the reformers, and gradually the diverse heterogeneous elements which had heretofore been cooperating only loosely, became united and consolidated into the modern and scientific school of Eclectics, which seems to me to include in its fundamental principles a preference for vegetable drugs, chiefly American-grown, the entire plant rather than any one or several of its active constituents; fluid preparations of the highest obtainable purity, administered in moderate doses frequently repeated and used in accordance with the principles of specific medication.

It was thus that the Eclectics threw away their great opportunity to become the school of the active principles and left this idea to wait yet a few years longer for Thackery to introduce into America the system of Dosimetry built up by Burggraeve of Belgium, and for Abbott and Waugh to take up the rallying cry of alkaloidal medication, intensive dosage, and the jugulation of disease.

J. M. FRENCH.

Milford, Mass.

THE VALUE OF MENTAL THERAPEUTICS

In our present state of psychological knowledge, there are few physicians who are not familiar with the important role played by the mind in the production of grave nervous and functional troubles, and there are many who go further and trace serious organic diseases to long-continued mental concentration upon certain organs until functional disturbances are finally converted into organic lesions. Most physicians of any considerable experience have noticed that, under altered and cheerful mental states, improvement and cure have followed in some of their most unpromising cases, and that such cures could not be fairly attributed to drug action alone.

My object in reporting a few interesting cases, in which mind dominated matter in producing and curing disease, is for practical reasons. In the outset, I do not wish to confuse the reader with any ideas based upon hypnotism, Christian Science, or faith healing, all of which may at times be contributory to salutary mental operation in the cure of psychic patients. But, I wish to impress it upon the physician that he will be able in a large majority of his patients to so modify their mental conditions as to immediately start reparative processes that will cure physical, nervous and mental ailments.

In the days of Negro slavery, and even now among the more ignorant and impressionable, a form of mental disturbance and perversion was, and is, quite common, resulting in death or complete loss of mind unless the proper psychic influences were brought to bear on them in time. There existed a firm belief among these poor creatures that certain ones had the power of placing an evil spell on anyone who had incurred their displeasure. This was known as being "tricked" or "conjured," and if any little physical ailment did not pass away quickly and they once took it in their heads that they were "tricked," they would immediately drift

into a most deplorable melancholia and temporary mental unbalance. The patient would lose all hope, become listless, cease to eat, and would seem to have no desire to interest himself or herself in anything. The form in which this trouble expressed itself was usually some slight functional disorder misinterpreted and insanely magnified or, quite frequently, an entirely imaginary loss of some function. Fortunately, in every neighbourhood, there could be found one or more shrewd old Negroes who professed to be able to "take the trick off," and I have known of many instances where physicians, seeing the futility of medical practice, have sent for the "trick doctor" to actually save the life of the poor victim of this mental affliction. I remember one case, in which a girl had eaten practically no food for three weeks because, she said, she had a lizard in her stomach that ran up and choked her whenever she tried to swallow. A lizard was secured and she was given a big emetic. When the slop jar was examined and the lizard found with the vomited matters, she was immediately cured of all her troubles.

I have seen many of these cases. Some of the patients die, some went insane and many were cured. But I have never seen anything but mental therapeutics save a single one, and in no class of cases have I ever seen more positive responses to psychic influences.

For more than a year, I attended a gentleman for recurring attacks of agonizing gastralgia with attendant duodenal and gall-duct spasm, which left him prostrated for days. In spite of every care in diet, these attacks would come on without warning and were becoming more frequent and depressing, so that it seemed a mere matter of time before they would wear him out entirely. With the great care and attention given him, I could not explain the continuance of this trouble. Finally, I asked him if there was anything specially worrying him in addition to his physical ailment; and he frankly told me that he had been living for more than a year under the greatest anxiety over the possibility of losing everything he possessed. He had come to this country from Scotland with money enough to start into business, but, after arriving here, he was persuaded to buy a large farm. A year or two later, he found that he had been victimized and that he knew nothing about farming. He then sold it for a small price and came to Richmond where he bought a partnership in a printing and publishing plant, for which he paid every dollar he

had. In a little while, suits were brought against the establishment to satisfy claims of which he knew nothing, and for a year he had been kept in fear of losing his only means for supporting his large family as the case dragged along under many continuances. It was finally appealed and still it seemed impossible to reach a trial.

The suspense was killing this poor man, and I saw at once that there was no remedy for his ills but a settlement of this case. I went to the plaintiff's counsel on my own responsibility and urged them, as a matter of humanity, to let the case come to trial and end it one way or another. To their credit, within a few days, the lawyers on both sides came together and settled it satisfactorily all around. They did more. For, with the relief of mental strain, my patient's physical ailments left him entirely, and his restoration to perfect health without drugs or dieting was rapid and permanent.

I knew a young man who was taken, on the street, with vertigo which frightened him very badly and started him to watching and magnifying every little symptom that arose in respiration, circulation or digestion. He soon developed palpitation of the heart and nursed the idea that he would fall dead upon any form of unusual exertion. He gradually gave up walking on the streets except for a block or two, and then only in company with some friend. For two years, he lived practically in the house and had much palpitation of heart, which was kept up by his constant watching of stomach and pulse beat.

As his case was purely a mental one, and as no amount of reasoning or argument changed his self-centered attitude, he was given up for good and all by his family as an invalid.

His cure was most remarkably wrought: One day, while all the family were absent, he awoke from a nap to find his room filled with smoke and flames making headway in the adjoining room. The nearest alarm box was two blocks away and, forgetting all about his heart and the chances of dropping dead from sudden exertion, he sprinted like a deer to the box and turned in an alarm. He raced back and commenced to remove valuables from the burning house. When the neighbors came to help him and warned him to be careful of his weak heart, he said "I don't believe I have ever been sick—I just thought so." His cure was complete.

The lesson to be drawn from these cases is,

to recognize the important part the mind can play in producing actual serious functional diseases, and the possibility of effecting cures through mental influence.

It is impossible to overestimate the value of cheerful surroundings in the sick room. I have known physicians whose smiling faces and contagious good cheer were so potent for good that it mattered little what they prescribed, if they would only tell the patient how it was going to act; for it usually acted as suggested.

For many years, I have made it a rule to not only direct the patient's mind towards the action of remedies that I *know* will follow administration, but to ascertain as far as possible just what their own outlook is concerning their recovery, or any other depressing mental states that might militate against recovery. I invariably examine all chronic troubles from the physical and psychic view points, and have been so often surprised to find a mental basis for apparent physical disorders that I now no longer leave this possible factor overlooked in making a diagnosis.

I will close this paper by reporting not only a very sudden cure but a most amusing consultation:

I had been attending a lady for some months, who had been drifting into a "decline", as we called those cases that we did not understand and that we could not cure. She was so low-spirited and despondent that I could not interest her in anything. It was plain that she had no wish to get well and was putting forth no effort to that end. I called one of the ablest and most prominent practitioners in the city in consultation and, after two months' constant attendance by us both, the only change noticed in our patient was, that she was still growing worse each day.

One morning, the husband suggested that we call in another doctor to consult with us, and named Dr. X, a man regarded by medical men as one of the very weakest in the profession. My dignified old consultant seemed utterly disgusted at the idea of meeting such a man, but I prevailed upon him to acquiesce and enjoy the fun if he could not edify us. Accordingly we all three met the next morning. We gave him an outline of the treatment we had pursued, but had no diagnosis; and we told him, we just did not know what was the matter. Then we turned the patient over to him for examination.

He approached the bed and said: "Mrs. W. what's the matter?" The poor woman broke out in a flood of tears and wept as if her heart would break. As she became composed, she

drew his head down and whispered in his ear for a minute or so.

He straightened up and looking squarely in her eyes said: "Madam, 'taint so, and I can prove it."

"Can you prove it, Doctor?" she asked.

"Yes I certainly can prove it, for, instead of being at the ball that afternoon with Maria Hudgins, your husband was at the races with me and won the last cent I had on Royster's black gelding."

"I wish to heaven he had been with Maria Hudgins or some other woman, for, I would have been seventy-five dollars better off."

"Doctor, you've cured me," she said, and straightway she arose and became clothed in her right mind.

"Well, I'll be damned," said my eminent old consultant.

C. A. BRYCE.

Richmond, Va.

SUN AND WIND

Open windows, open doors,
Sunshine, air, the Lord outpours;
Let the air sweep every room,
Help the housewife's busy broom.
Let the Sunshine flood within,
Brighten, cheer, where gloom has been;
Death's hid germs let search and find,
Kill them with the Sun and Wind.
Change the pallor of the sick,
Give to health a firmer kick;
Paint rich roses on the cheek,
Let ruby lips their language speak.

When pure ozone fills the blood
There is waking thought and mood;
Sprightly zest and quickened pace,
Fitting one to run life's race.
Take then clements so free
Given to humanity.
Given to bless and make alive,
Mind and flesh, the man revive.
Nothing is the cost to pay
For the Sunlight day by day.
Nothing for the flowing breeze,
God supplies the need He sees.

JAS. A. DE MOSS.

Chanute, Kan.

IDIOSYNCRASY TO BUTYN

Mr. P. age 54, weight 143. Tonsillectomy attempted under local anesthesia using butyn (Abbott).

Surface anesthesia was obtained by first dissolving one anesthesin-calcidin troche (Ab-

bott) in the patient's mouth, then swabbing the mucous membrane with one drachm of a solution containing three (3) grains of butyn (Abbott). Injection of the tonsil was then begun, using a 2¼-percent solution of butyn, four mils being injected in the right tonsil in about three minutes, when the patient suddenly stiffened out in a severe clonic spasm, lasting about one minute, then stopping for 8 to 10 seconds, then followed by more clonic spasms of shorter duration. The spasms covered about ten minutes and were of sufficient severity to inhibit respiration.

Following the spasms, the pulse rate was 130 for a short time, but the quality was good. Pulse rates soon became normal. Patient complained of a severe occipital headache which became general in a short time and stopped in a couple of hours. No abnormal symptoms of any kind were noticed beside the spasms, which appeared to me to be the same as is sometimes met with when using cocaine for the same purpose and which I believe to be an idiosyncrasy of the patient, and not due to the toxicity of the drug, for I have personally used as high as nine (9) grains of butyn intramuscularly with an entire absence of any toxic symptoms and the body weight of the patient was considerably less than in this case.

LLOYD A. BURROWS.

Salt Lake City, Utah.

[This patient probably had an idiosyncrasy to butyn. It is unnecessary, however, to use solutions as strong as that employed by Dr. Burrows. There are many reports of such operations as tonsillectomies being performed under butyn, varying in strength from ¼ to 1 percent, with perfect anesthesia and excellent results. It is doubtful whether a stronger solution than 1 percent need be used in any case of infiltration anesthesia.—Ed.]

NERVOUS REFLEXES—AND SIN

I most earnestly desire to direct the attention of the readers of THE AMERICAN JOURNAL OF CLINICAL MEDICINE to an article in the April issue of the *American Review of Reviews*, entitled "The Winning Fight Against Mental Disease," by Burdette G. Lewis.

I wish to fix your minds on the ideas that I have been trying to teach—that human nervous reflex is the prime cause of sin and insanity. These are not mere theories but really capable of practical demonstration. For, unknown to me, the New Jersey institutions for the insane have made, and are making, daily

practical tests, as you will see by reading the article referred to. The articles I have written were published in this journal under the captions "The Human Won't," and "The Human Body."

C. S. COPE.

Tacoma, Wash.

U. S. CIVIL-SERVICE EXAMINATIONS

The U. S. Civil-Service Commission announces an open competitive examination for junior medical officer to fill positions of physicians in the Indian service and as surgeons in the Coast and Geodetic Survey.

Entrance salaries in the Indian service range from \$1,000 to \$1,200 a year, quarters, heat and light being furnished free of charge and the privilege of boarding at the common mess at a very low cost being accorded. The government furnishes all drugs and equipment and means of transportation.

The entrance salary in the Coast and Geodetic survey is \$1,020 a year and allowance for subsistence at \$1.00 per diem while serving on board ship, except in the Philippines where the allowance for subsistence is \$2.50 per diem.

Appointees whose services are satisfactory may be allowed the increase granted by Congress of \$20 a month.

The usual requirements as to graduation, and so forth, are accepted. Applicants must be between twenty-one and fifty years of age for the Indian service; between twenty-one and forty-five years for the Coast and Geodetic survey service.

Applications will be received until further notice. Particulars concerning this examination can be obtained by addressing the U. S. Civil-Service Commission, Washington, D. C.

SPARTEINE SULPHATE

My clinical experience with sparteine sulphate, covering a period of about thirty years of bed-side observation, is, that it is an indispensable heart remedy. Its use is best where there is valvular weakness allowing regurgitation of the circulatory fluid. With this condition, there will be asthmatic or oppressed or labored breathing. The pulse feels oppressed, full and irregular, but soft and weak. There may be edema of the lower extremities and the kidneys may be also sluggish; in consequence, the urine will be scanty.

The dose must be at least 2 grains, and this can be given every two to four hours if need be, without any stomach disturbance.

Where apocynum is indicated, but may cause nausea and vomiting, so that its use must be discontinued, sparteine sulphate will be found an excellent substitute. This latter remedy will not take the place of digitalis, for this remedy is usually indicated where there is a

feeble heart and feeble pulse and which may be also irregular.

In case of cardiac asthma from valvular deficiency, in a gentleman of 65, who could only breathe with difficulty, in a sitting posture, 2-grain capsules of sparteine sulphate, every two hours, was the only remedy that gave him any relief. I have several patients with heart irregularity who take 2 grains of sparteine once or twice daily and who, without it, would have suffered intensely with shortness of breath, dropsy of the lower extremities and inability to any exertion.

Without sparteine sulphate in these cases, I would be at a loss for a better remedy. Don't forget the indications calling for this remedy: irregular heart and pulse, full oppressed pulse but soft and weak, difficult breathing and dropsy.

A. S. TUCHLER,

San Francisco, Cal.

FOR A NATIONAL HEALTH WEEK

Your editorial in the July issue, entitled "For a National Health Week", is very much to the point and most seasonable. If a nation-wide campaign can be inaugurated, and vigorous educational propaganda broadly sent forth to show the whole people just what the medical profession has done, is now doing, and proposes doing in the future for the welfare and happiness of the race, it will be a consummation devoutly to be wished for.

Ideal altruism is perhaps never found in any class or group of men, or even in any individual, but such an attitude of mind is more closely approached and more nearly attained by the medical profession than by any other. The highest type of unselfishness, the really Christ-like character, is to be found in the heart of the true physician.

While there seems to be a growing lack of confidence in the public mind as to the real knowledge and unselfishness of the doctors and their fellow workers, owing perhaps to lack of education and information and a disinclination for advertising themselves, possibly the worst enemies of the medical profession are to be found in their own household. When we see in the daily press, and even in the columns of reputable medical journals, articles over the signatures of men with college medical degrees, and presumably reputable practising physicians, denying the efficacy of vaccination, condemning absolutely the use of sera, and raising holy hands in horror at the crimes perpetuated under the cloak of scientific vivisection, is it any wonder that the ordinary layman is somewhat con-

fused in his ideas regarding matters medical, and is slow to give credence to what appears perfectly plain to the trained medical mind? "If the doctors themselves hold such diametrically opposite views, how do I know that any of them are right?"

The time for such a publicity movement as you suggest is ripe, for the minds of people in general are being directed to public-health matters and preventive medicine; and it is well that they should be educated along right lines, lines that lead to safety.

GEO. ACHESON.

Kingston, King's Co., N. B.

AFTERCARE OF LAPAROTOMY PATIENTS

Not long ago, laparotomies were performed quite often without known indications and merely to find out such, in order to diagnose, to do what was found to be done, and then to close up the wound. And the public had to stand such investigations and such research.

Today, the patient wants real indications for permitting his abdomen to be opened, and there is not much chance for a young surgeon to learn the technic of laparotomy on his patients or to do any of this kind of research work. Today, any surgeon who opens the abdomen not knowing what he is going to find after entering the abdominal cavity is not only a very poor diagnostician but also a very poor surgeon.

Laparotomy is considered a major operation which demands a good deal of surgical skill, and we are all agreed on this point.

On the other hand, we hear too often that, nowadays, everyone is doing his own surgery, especially when it comes to appendicectomies. It surely must be a very simple operation, one of minor surgery and, probably, one that must be excluded from the class of laparotomies. If not, then laparotomy after all must be a very simple operation.

"If an appendicectomy were the harmless affair that some surgeons would have us believe, we surely would not have, in the death notices of the *Journal of the American Medical Association*, so many of our confrères die from the results of operations of appendicitis . . . since no physician will be fool enough to select a mediocre operator for his own case." (Blech.)

This says enough and, making the story short, I will add that I, and many others with me, will agree with Doctor Blech that "one may have done thousands of appendicectomies without a single death and his clinical experience may be absolutely worthless to the student. He may have been lucky or else he may

have had mild cases. Therefore, for this reason or the other, I have every right to assert that the operating room should be not a research shop and that even the best technician in appendicectomy, with a record of not a single death, has absolutely no right to open the human abdomen without having equal knowledge and technic to meet all other pathological conditions that may be encountered within the abdominal cavity.

One kind of surgery for one or a few pathological conditions is no surgery at all, and goes only as far as it goes. Then it suddenly stops, and always with sad consequences to a patient. This affects the medical profession as a whole, destroying the confidence of the public in the medical profession and inducing the sick to resort to people "who do surgery without the knife" and many other funny things. As for individuals, we do not care if they don't care for themselves and for us at the same time.

Here is the manner in which the medical profession has lost prestige in the eyes of the American public, while it stands so high in other countries, as we had occasion to learn there during the war and at other times.

Referring once more to the discussion of Doctor Blech of appendicitis, in the last two issues of *CLINICAL MEDICINE*, I wish to say that I found it more instructive than that in a dozen different books on this subject. However, Doctor Blech left out the most important subject of the whole part and that is, the postoperative treatment of all laparotomized patients. And he knows it, too, when he says: "In my opinion, proper postoperative care is as essential as good operative technic. I have seen a number of patients doing poorly in spite of the presence of high-priced special nurses and I have seen worse cases than the ones just alluded to do exceedingly well under ordinary floor-nursing care." To this, I remark that I, too, have seen the same. Therefore, I have reason to appeal strongly to Doctor Blech for an article on this so important part of surgical treatment, as he has ample experience in this subject, not only from his civilian practice but also from his observations in military service, which gave us so many new ideas for the better in medicine and surgery.

I am sure that such an article will be fully and highly appreciated by the larger portion of readers of *CLINICAL MEDICINE*. We have to stay with a patient much longer after he is awake from anesthesia, than during the operation alone. One of my patients, a second lieutenant in the Polish Army in France, died three weeks after the injury, not from severe internal

hemorrhage or from an unrepaired descending colon (and what not) but from postoperative pneumonia. In this case, a bullet had entered the epigastric region of the left side and made two openings within the abdominal cavity, then turned down along the descending colon and by its rotation had torn into pieces everything on the left side, way down to the pelvis, where it was imbedded. Although two attempts had been made in behalf of this patient, the bullet was never found.

Deaths are reported more often from complications than from primary causes and, therefore, if such complications could be avoided through proper postoperative treatment, the mortality in surgical interventions would be considerably less.

To illustrate how a very simple appendicitis may become a serious case to handle, I will only report a case, the patient being convalescing now at St. Mary of Nazareth Hospital.

Young man, age 20, ex-soldier of Polish Army. Became sick, on June 17, with slight general abdominal pain which soon localized at McBurney's point. It surely can not have been severe. Nobody attended the patient before me and I was called first on June 21. The reason for calling me to see this case was not because of pain anywhere but because the patient began to turn yellow.

Except for slight jaundice, I found him in bed with a smile on his lips and a good facial expression. The pulse was 56, the temperature 100° F.

The present history was as given. The past history shows susceptibility to gastrointestinal trouble, with constipation which was treated with various cathartics and with diet.

He experienced the best health while in the army.

The colon was tympanic, but there was no tenderness all over the abdomen except at McBurney's point. The region of the gall-bladder was negative (no local tenderness, enlargement, or radiation pain). The liver was found in its normal boundaries. There was slight diarrhea, probably due to laxatives.

My diagnosis at this time was double:

- 1.—Chronic appendicitis with absorption of pus, which caused toxic congestion of the liver and jaundice; or
- 2.—Chronic appendicitis (recurrent, more severe attack) with probable gall-stones.

I advised immediate operation.

The same day, the patient was brought to the St. Mary of Nazareth Hospital, in good condition, walking with no difficulty and with only slight tenderness (at McBurney's point)

when stepping on his right foot. He was not willing to go to bed, but remained up and about the room.

Instructions were given to prepare the patient for operation the next morning, but to give him only enemas; no laxatives by mouth.

The following morning, the patient was in the same condition, except that his jaundice was more pronounced. The blood-count report showed hemoglobin 85 percent; red cells 4,400,000; white cells 9,800; coagulation test 4 minutes; urine negative.

Operation was decided upon and performed with Dr. T. Z. Xelowski's assistance, making a 3-inch long incision at the level of the umbilicus on right side over rectus muscle, in order to reach the gall-bladder and the appendix from the same opening.

The appendix was removed and the gall-bladder was found empty and without obstruction to the passage of the bile.

Pathology found: Chronic appendicitis with cicatrices and adhesions at its tip, and slight congestion of liver.

The operation was performed in fifteen minutes. The day after, early in the morning, the patient had a hemorrhage from the bowel (dark, coagulated blood), and jaundice was of severe type. Pulse increased to 100 and temperature to 101° F. The patient was transferred to a private room with private nurse. His head was raised and horse serum was injected.

In the evening of the same day, the pulse went up to 120; the temperature to 103° F. Enteroclysis was ordered, also an enema of calcium salt. The patient was kept quiet with morphine, and hot water with lime water was ordered *ad libitum*. During the night, the patient had only one hemorrhage, but in all he had, in twenty-four hours, 4 to 5 copious dark bloody bowel movements of dark coagula.

June 24, the morning pulse was 100, the temperature again 101° F.

The same treatment was continued, with two daily enemas of calcium salt. Hemorrhage decreased rapidly, so that there was very little blood washed out with the enema.

Next evening, the temperature was 99° F., the pulse 98.

June 26, morning, the patient was out of danger and was ordered soft diet. The wound is healing with primary union and without even a slight hematoma being present.

Now, what was the cause of this whole trouble? Poor surgery?

By no means. There was very little surgery done and the stump of the appendix was, after

inversion, tied securely with silk, then sewed up over again, ligating the arteries with sutures.

The real cause of the whole trouble was, toxic jaundice, which was only slight but increasing before operation. It was aggravated by the anesthetic, developing a hemorrhagic diathesis. The temperature of 103° F., on the second evening, was probably due to the horse serum.

The patient is still in the hospital, with normal temperature and pulse at 80, with stitches not yet removed, convalescing. His blood count shows 5,000,000 red cells; 8,500 white cells and 90 percent hemoglobin.

The question now arises, are we right to operate to remove the cause, when the coagulation test is 4 minutes and not 6 or 8? Or shall we not operate? What chances are we taking by waiting?

This is a most important question, not only in this but in all similar cases which are left to the "occasional surgeon" to decide, no matter how simple an operation in technic and pathology he is going to perform.

As most trivial operations are considered adenectomy and tonsillectomy, yet, we occasionally hear of deaths as the result of such operations in the hands of occasional surgeons.

Either you are a surgeon and do only surgery, or you let the knife alone. A knife will not fail, but your hand may.

The only excusable surgery for the occasional surgeon is emergency surgery and that only until he gets in touch with a surgeon.

Nowadays, every Ford owner tries to be his own mechanic, because he can buy the parts even in the drugstore. A good surgeon must know how to "save the pieces," because none are on sale as yet, even in drugstores.

F. LENART.

Chicago, Ill.

ANILINE POISONING

Readers of the JOURNAL may be interested in the following case of aniline dye poisoning, which occurred in this city, recently. For the benefit of the skeptical, whose experience has been limited, your comments, with analogous cases, will be appreciated:

My wife purchased a pair of cloth low shoes, with rubber soles for our little boy of 11, but as the color was too light they were dyed a blue black in the store. A few hours afterward, wearing the shoes, the little boy's face was seen to be of a peculiar blue color, and he complained of a chill. The mother, experienced in

care of the sick, applied the colon tube, with abundance of hot water, inducing rapid elimination through bowel, kidneys and skin, when she noticed the same blue color to the excretions, and the peculiar odor of dye. Examining the child more carefully, the entire body was found to be colored a deep blue, and the feet were almost black, as they had perspired while he was at play. She at once called me, and under powerful stimulation the patient made a speedy recovery.

The foregoing is not an isolated or strange case, as I have seen numerous cases of poisoning among workers in dyes as well as among weavers, in Latin America, and have, in many instances, been called upon to treat serious cases in the past 25 years. But in this country, where opportunities seem to be lacking for the general city practitioner to acquire much useful experience, the narration of cases like the above, is dismissed with a shrug, which may be interpreted in various ways. However, all cannot be expected to profit, but the wise will remember.

C. F. SECORD.

Omaha, Nebr.

SPECIFIC SYMPTOMATOLOGY FOR THE EMPLOYMENT OF HAMAMELIS

Relaxed mucous membranes, dark-blue membranes from venous stasis, veins dilated, relaxed, enlarged; and full—varicosis.

For several years, but particularly since the influenza epidemic, many people have been left in a weakened condition, presenting many and varied symptoms. Many of them complain that they tire easily. With little exertion, they become dizzy, feel like falling over, heart beats fast in some, in others slow; feel the necessity of breathing long and deep; may have some pain in the left chest over the heart. In the full-blooded, the face may become purplish red; when the hands hang down, the veins become enlarged, dilated, relaxed, and full. On auscultation, in most of the cases there is nothing to be learned, in others the heart is dilated and there are murmurs from every valve.

From the focal infection, probably, the circulatory system, at least the heart and veins have become infected. There is a poisoned heart muscle. The veins lose their tonicity, become relaxed and dilated, in consequence holding far more than the proper proportion of the blood of the body. This being true, there is a lack of blood in the arterial side. Like in some rivers, there is plenty of water, but too much of it spread out in stagnant pools, bayous, and

sloughs. Too much carbonic-acid-carrying blood, too little hemoglobin-carrying blood; too much venous blood in the lungs, possibly lessening the capacity of the air cells; too little hemoglobin to use the oxygen from the cells.

All this, to my mind, accounts for the air hunger, the dizziness, the at times bluish skin, especially of the fingers and under the finger nails.

How much of the opinion expressed may be easily-exploded theory, I will not attempt to say; but, acting on this theory, after many therapeutic experiments, I have evolved what is to me a satisfactory treatment.

Venous stasis, veins dilated, relaxed, enlarged! I need something to tone up the musculature of the veins, to lessen their caliber, to squeeze the blood over to the arterial side.

I have used hamamelis for piles for some time, with good results. If it will shrink up the pile, why will it not do so in the lungs and other parts of the body? It does. I have been giving three drops of normal tincture, or hamameloid 1/6 grain, every hour with results very noticeable within two or three days. In three days, the purplish red will have left the face. In many other cases, the veins will have apparently shrunk to normal, the bluish tinge has left the hands and fingers and air hunger is less pronounced. I have learned to use hamamelis as the dominant remedy.

I use others to help. *Cratægus Oxycantha* as a general circulatory tonic, strychnine for its tonic effect. Of late, I frequently add *collinsonia* as an aid to the hamamelis and also for its heart-tonic effect. The following formula is very often used by me:

℞ N. T. Hamamelis 1½ dram (or hamameloid 1/6 gr)
 N. T. *Cratægus* 1 dram
 N. T. *Collinsonia* 1 dram
 Strychnine Sulphate ⅓ grain
 Pepsin Compound 4 ounces
 Sig: 1 teaspoon every hour.

If there is pain over the heart, add N T *Asclepias Tuberosa*, 2 drams.

If the heart is too rapid, I give lycopoid (Abbott), 1/6 grain. One every hour.

Mrs. H. had influenza, in the fall of 1918, from the effects of which she has never recovered. She has had bronchitis with cough and expectoration; tuberculosis is feared. Asthma developed; can not lie down at night. Has been under constant medical, chiropractic, and other kinds of supervision. Was in the State Hospital several months, where serums were used. Has been to other climates for her health.

While getting the history, I noticed that the

veins in the back of the hand swelled up and were very compressible. There was a bluish tinge to the skin of the fingers. On questioning, I found that she was able to do but little. Exercise caused what I call "air hunger." The long, deep, sighing respiration, rapid fluttering heart, a feeling that she would drop, and dizziness. From these observations, I explained to her that her principal trouble was her myocarditis and dilated veins, and that the origin of all her troubles was an infected throat. The treatment was:

Hamameloid 1/6 grain
Lycopoid 1/6 grain
One of each every hour.

Colinsonia, strychnine, and cratægus as above.

The throat was treated with argyrol or silvol (I grind up the silvol in a mortar and spray it in the throat dry by a DeVilbiss powder blower).

Improvement set in immediately. In three days, she was relieved of the asthma, could lie down and sleep all night. Treatment was persisted in for several weeks with full recovery.

Mr. A. was brought in and complained of being nervous, was easily annoyed, was worried about himself. On questioning, complained of weakness, was easily tired; prone to take long deep breaths; irregular, fast heart action on very little exertion. What particularly called his attention to himself, however, was a numbness in his arms and hands. He felt that his hands swelled, his fingers felt too thick to shut tight enough to hold articles.

I found the same condition of veins and infected throat. Diagnosis was the same and treatment was identical with that in the previous case, with rapid recovery.

I was called to Mrs. P. because she felt so weak in her heart region, felt that the heart would stop, veins very much dilated clear down to the nails of the fingers. Hamameloid, cratægus, strychnine were administered, with rapid benefit and eventual recovery.

About all that many of us know about hamamelis is, that it is good on the face after shaving. Only lately did I learn that it was valuable—very valuable—in many of the troubles caused or accompanied by venous stasis, dilated, relaxed, enlarged, and full veins—varicosis.

W. A. McCONKIE.

Cedar Rapids, Iowa.

[Dr. McConkie's observations are unusually interesting and instructive. His reasoning is proved to be sound by the results that he obtained. Hamamelis appears to possess possi-

bilities for good and useful work, of which we hardly had any conception. Surely, many of us will want to repeat Dr. McConkie's method and, we hope that many of our readers will report to us concerning their experiences.—Ed.]

HOW TO REDUCE EYESTRAIN MAKING GLASSES UNNECESSARY

Prolegomena

Since the article following below was written, I have read with special interest Dr. Edward A. Tracy's article on epilepsy, in the July issue of *CLINICAL MEDICINE*. From a special study of epilepsy and some experience in treating it after the method reported, a few years ago, by a French investigator, and with Doctor Tracy's rich experience and good reasoning, I feel warranted in stating this conclusion: Toxemia in childhood, from bad feeding and bad elimination, and as the French physician referred to (whose name I can not recall) declared, the toxemia of childhood, especially from scarlet fever, whooping cough and measles, producing hypertonia of sympathetic fibers (Dr. Tracy says, "hypertonia") is the cause of epilepsy.

If, as in infantile paralysis, the havoc wrought in the nervous system is not too great, epilepsy is curable, providing that it be not too long neglected. This is confirmed by the French authority referred.

In 1908, I had a case of a young man of 24, who had suffered a seizure on the train on his way from Florida to Battle Creek and who was prostrated again the day after his arrival (I recall) but who recovered so completely that he walked back home, as reported in the *Daily Journal* of that city, at the time. Success in that case and in others was due to recognition of the etiology stated by Doctor Tracy and to treatment based thereon, particularly through improvement of elimination and nutrition and to a system of treatment based upon the same principles, now better understood, as those upon which the treatment for the reduction of eyestrain, explained in the following article, is based.

I have also read with much interest the mention, in the July issue, of the good work of the Eyesight Conservation Council of America.

Doctor Tracy states in his excellent article that fright in childhood may cause epilepsy. Note the suggestion in my brief reference to the establishment of myopia in childhood as to the influence of fear as a causative factor. "Hypertonia"—the term is established, but not

quite correct—and "hypotone", deficient tone, lack of normal capacity for correlated "tenso-laxing", the process of all vital activity, are the chief ultimate causes of disease. The correction of this, by physical and mental means, will become a large means of cure and of increasing health and fitness, in the future.

For many years, I have maintained that we should see in pathologic action the efforts of nature to restore the normal condition; so that, instead of antagonizing such action by symptomatic treatment, the physician should cooperate, should "follow nature", to borrow a pedagogical motto. Even the totality of the symptoms does not always make the law of similia a safe guide, while the celebrated safety-first rule, "amusing the patient while nature makes the cure", is liable to err as seriously by omission as the older rule of *aliquid fecit* "for effect", errs by commission.

The extreme "hypertonia" followed by extreme "hypotone" that characterizes epilepsy is highly significant. The use of drugs is as futile as in infantile paralysis.

On Eyestrain

"If eyestrain can be reduced by so simple means as that, physicians should be glad to adopt the system", said the Editor, when I explained that I had been investigating the revolutionary method introduced by Dr. William H. Bates, of New York, whose book on the subject was reviewed in *CLINICAL MEDICINE* July 1921, p. 491.

Few of us are prepared to go so far as the founder of a certain Chicago "medical" school, who has been teaching for twenty-five years that all diseases are caused by eyestrain—a view that leaves little room for the theory that spinal irritation is the cause of all disease, or, for that which makes the mind responsible for all of them.

Probably, however, we are all satisfied that the conclusion of Dr. George Crile, announced a few years ago, is justified, that eyestrain is the cause of a large proportion of our digestive and other functional disturbances.

The general practitioner has long been in the habit of sending a large number of the patients that come to him for consultation to the oculist, to have glasses fitted. Now, if Doctor Bates' view is correct, as his ample research and clinical evidence seem to prove beyond reasonable doubt, there must be a change.

If glasses can not fit perfectly, because eyestrain is influenced very largely by the systemic condition; and if the tension in the muscles that is the real cause of the strain can be overcome, in most cases, by simple ex-

ercises, making glasses unnecessary—if this revolutionary view is correct, we must do away with the use of glasses in all but the few cases in which actual structural defects exist.

Seeing (without glasses) is believing. I had been using glasses for nearly forty years. I worked out a very simple method based upon the theory of Bates. It worked so well that, in a couple of weeks, I stopped using glasses and now, for many months, I have not used them at all.

The purpose of discontinuing the use of glasses is not merely to avoid the inconvenience of the eye crutches, but the great improvement in the general health that results from the reduction of the strain that is maintained more or less, as long as glasses are used.

The most serious cases of indigestion, diabetes and other chronic ailments have been cured by reducing eyestrain. By the wearing of opaque glasses, which entirely eliminates strain, goiter has been cured.

When the oculist examines the eyes with the wonderful instruments that have been developed for the purpose, he sees conditions that he regards as permanent changes; but, many of these have been demonstrated to be merely conditions produced by fatigue or irritations from improper use of the eyes.

Seeing is a passive process. The image is formed without any efforts on the part of the person seeing it.

Much of the eyestrain that is universal among civilized races is due to the erroneous notion that good vision is dependent upon conscious effort; thus, a habit of unnatural strain is engendered that is most serious in its far-reaching influences, furnishing a degree of reasonableness to the school that treats everything by treating eyestrain.

When, however, we recognize the now well demonstrated fact that good vision very largely depends upon capacity for properly correlated contraction and relaxation of the various eye muscles, without the conscious effort that we develop by long-continued incorrect practice, we shall see that the remedy is not the adoption of eye crutches, but the substitution of normal for abnormal.

This implies a certain amount of systematic practice to change the habit of using the eyes, just as we must devote some effort to correcting a wrong habit in walking, eating, or any other semiconscious function.

There may be some doubt as to whether it pays for one who eats a meal in half the time that is needed to masticate properly so as to

have good digestion; but, no one who will take the time needed to reduce the eyestrain to which we are all accustomed will fail to see that the time is well spent.

Occasionally, there are junctures when we have not time to sleep or to eat, but the man who carries the idea, that he has not time for those fundamental requirements of health and efficiency, will lose a good deal more time than he will save—and money, too, if it is the pursuit of riches that is the motive for his foolish practice. The same is true of the treatment of the eyes. It pays to take the time, however "busy" one may be.

While eyestrain lowers the vitality of every vital function, so does the lowering of the vitality of the other organs affect the eyes. Just as you are a little taller in the morning than at night, so you can, ordinarily, see better in the morning. So, glasses can not always fit properly; and, it is admitted that imperfectly fitting glasses do more harm than good. The degree of misfitting varies, but, any practitioner who has given this matter any attention at all must know that complaint is commonly made, especially by persons of early middle life, that their "glasses hinder their seeing more than they help, half the time." Now, of course, this is an important indication as to the advisability of a person, who is not really lame, carrying crutches all the time.

My purpose is not to attempt to show that there is no use for spectacles, but only that, in the majority of cases, there is a better way.

Roosevelt mentions, in his Autobiography, that he had trouble in his school work, as a child, as a result of defective vision. Nearly all the cases of defective vision in children, for which glasses are used, are caused by improper methods of teaching.

When a child is excited and unduly anxious to recognize unfamiliar form [and he is usually excited, worried; moreover, the practice of introducing too many new words and several alphabets at once (upper and lower case, Roman and script) is calculated to establish the habit of serious eyestrain, which grows steadily, requiring that he be "fitted"] he tends to strain his attention and his eyes at the same time, so that, to use a colloquial expression that indicates an effect of an unexpected blow or shock, "he can't see straight".

Is it any wonder that, "educated" as we are, we should establish in our school days a habit of crooked vision that is gradually accentuated till we find it necessary to consult "a stomach specialist" who may be broad enough to send us to the eye specialist?

Having a little inside information on this matter of eyestrain in childhood, as caused by vicious methods of teaching reading and drawing in the primary school, I devised a simple phonetic alphabet, using only upper case forms, and the complete forms for drawing familiar objects, as a means of breaking, for my own children, the strain that I knew they must suffer in the primary school. When will the school men learn this simple lesson?

Doctor Bates, who will in due time receive credit to which he is entitled for his great discovery, was preceded by the distinguished Austrian Ophthalmologist, Alt, of the University of Vienna (about 1850) who, for a long time held this "new" view of the cause of eyestrain. Doctor Bates has cured hundreds of children, in New York public schools, of wearing glasses.

A respectable manufacturer of supplies for children, in Chicago, told me, the other day, that he was satisfied that his serious astigmatism was caused by maltreatment he received in childhood at the hands of foreign schoolmasters—being beaten, often, "till he couldn't see straight." It was not without considerable effort that I avoided a street scene, a day or two later, by forcibly assuming the *locus parentis* when I saw an irate father dragging his eight-year-old boy (possibly his pupil) by the ear from the street to his back yard, while the child expressed his feelings in terms that would have caused a common devil to desist.

Among the inalienable rights that belong to the child, under this constitution if not in the natural order, is the right to maintain normal vision for life by proper treatment during childhood, in school and out.

As I have mentioned before in an article in this JOURNAL, I taught for four years in a Quaker boarding school and studied the science and art of teaching before entering upon my present line of work, so that I feel that I have a right to suggest to the officer who is fitting glasses for school children the advisability of reading Doctor Bates' book, from which he may get a hint for the treatment of his own myopia, acute or chronic.

A few years ago, Dr. William Rittenhouse said, in an excellent article on constipation, that what the conscientious physician needs is a series of "little lessons" that he could place in the hands of his patient, giving the instruction that it is impossible for him to find the time to transmit orally, but which the patient ought to have in order to secure the best results; since so much depends upon the correction of bad habits that have brought on the

conditions he is endeavoring to correct by the treatment—habits that no ordinary written prescription can correct.

Undoubtedly, the plan of the "little lessons" will be adopted, in the near future, far more generally than Doctor Rittenhouse suggested. Surely, the restoration of health depends very largely upon the patient's learning how to eat better, how to exercise, how to bathe, how to think—even how to breathe.

The "diet lists" that have been furnished by some physician's supply houses, and which contain those articles of food that patients should and should not eat, save the time that would otherwise be required to write them; but, this is only a short step in the direction suggested by Doctor Rittenhouse.

We could not hand the patient a copy of a good work on diet—if there is one that the patient could use, without more harm than benefit—nor would Doctor Bates' book be appropriate as a guide to the average patient in the method of reducing eyestrain. Moreover, there is a better system for applying Doctor Bates' principle than he gives.

I shall endeavor to state this method, briefly, hoping to receive reports from physicians who may decide to give the method a test, personally and in patients, including a statement of difficult problems that may arise in its application to various cases.

Relaxation is a passive process not to be induced at will, but only as a reaction from tension, just as some drugs and other means are used for their secondary effects. This has never been duly recognized, either in physical or mental treatment. Dr. S. Weir Mitchell's rest cure, for example, failed in most cases because this principle was not recognized. So, Doctor Bates' method of applying his important discovery is largely inefficient because he fails to correlate tension and relaxation—fails to apply the technic of *tenso-laxing* (to use a term of my own coinage); as all practitioners of physical and mental methods fail, more or less, for that reason.

The different eye muscles should first be strained a little beyond the point of the greatest fatigue to which they are commonly subjected; then they should be completely relaxed, by shading the eyes from the light while keeping them closed and holding the thought of complete relaxation; or, by looking to the greatest distance convenient, say, seeing the clear blue sky.

Small type may be used to induce eye strain, up to the point of fatigue and then relaxing completely. Then, read large, plain, black type

for a few minutes' time.

Hold a pencil point close up to the eyes, in front of the bridge of the nose, straining to see the point, inducing fatigue; then hold the pencil in position to the right, left, above and below, upper oblique and lower oblique, following each position with proper relaxation.

By having appropriate sizes of type printed on cards, with the necessary instructions, the patient can learn to do this drill work without much supervision.

Past experience should suggest the advisability of being a little cautious about condemning a new view merely because we do not at first see why it can be right. It is easy to test the correctness of this new view of the cause of most eye troubles, as I have done myself, before even admitting to myself that such a revolutionary view could be correct.

THOMAS J. ALLEN.

Eureka Springs, Ark.

PRACTICING MEDICINE IN THE WILDS OF AMERICA

When I attended college, a dollar was of more value than a hundred is now. It was the era of shin plasters and gold premiums. Father looked up daily the comparative value of gold and the greenback. What a boon it would have been to me if I had had the opportunities that are now within reach of aspiring young men desiring a classical as well as medical education. Friends loaned me the necessary means to put me through college and were willing to wait until I could pay them back. When General A. C. Dodge informed me that his sole source of primary education was six months at school, and that he and his little sister rode horseback each day, thirteen miles to school and that was all the schooling he ever had, I felt much encouraged. I said, if a man with such meagre advantages can become Senator of the good old United States and even Minister to Spain, through self education, there was no justification for doubts as to my succeeding.

Talk about economy! I know what it means: self abnegation and the privations that go with it. By nature, I possessed the dogged determination of the Pennsylvania Dutchman and the impetuous traits of the Irishman, being a cross between the two races. The restraining influence of the Dutch breed saved the life of more than one individual and possibly my own. Arriving at one of the frontier mining camps, I sought out the only hotel in the village. It was an unpretentious structure but, believe me,

it furnished the "cats." We were served venison, elk and the usual other meats daily and Sundays, and a bear-roast quite often. Game was plentiful and there was no restriction on the killing of game. I sat on the veranda in front of the little dinky hotel, one day, and counted fourteen mountain sheep, watching their antics as they leaped from crag to crag, near the summit of the mountain slope facing the hotel.

I hadn't been there a week, before I got unexpectedly into trouble. It happened this way: Liquor was as plentiful as water. Liquor crazes some men, some it makes jolly, whilst others it puts to sleep. One of my new acquaintances seemed a capital fellow, about double my age. The first thing he did was, to bone me for ten bucks and, to his credit, he paid it back. One day, he got to boozing. I always made it a practice to keep away from drunken men. I kept out of this fellow's way; but, after dinner, he came to my room in a perfect frenzied state of mind. You've seen froth on a mad dog's chops? That was he. He got it in his "noodle", as O'Neil was wont to say, that I owed him twenty dollars. I was shining my shoes at the time and spoke to him in a very pacifying manner, trying to soothe and quiet him. He grew into a rage and, suddenly drawing from his pocket a huge dirk, swore he would cut my heart out of me. I asked him to wait just a minute until I finished shining my shoes and, walking over to the dresser, I dropped the brushes in the drawer. At the same time picking up my 45, I whirled and quick as a flash had him covered. Not saying a word, I pointed to the door. He knew by my looks and actions what I meant and no man sobered up more quickly than he. He retreated. When he had gotten over his spree, he came over to me one evening and apologized very profusely for his misconduct. I told him that, if liquor served him that way, he should never touch it and I don't believe he did again.

I believe every one carried a gun or some weapon for self defense. There were no banks, of course, outside of the larger towns, and, what money you had, you carried with you or secreted about the premises. Road agents, so called, hid in the mountain fastnesses. When caught, they were not paroled except by the hemp-rope method. Sam Bass and his coterie were the terror of that Country in those days. I was in George Town, the morning he killed Schneider, owner of the Dives mine. Some

parties had located a lead and named it the Pelican and it seems that this vein intersected the Dives mine. Great quantities of gold were being taken out, resulting in a big law suit. Schneider was killed to get him out of the way. A posse trailed Bass over into the Blue Mountains of Utah and that ended Sam's career.

A little incident at George Town shocked me more than facing a gun or knife. What funds I had, I carried in a canvas belt buckled around my waist. I stopped at the Walton and, that night, this belt interfered with my rest. So, I took it off and placed it underneath my pillow. Getting up the next morning early, I dressed and moseyed down town, leaving my money under the pillow. About three blocks distant, I thought of it, and back I raced, up the stairway, like a catamount. The clerk thought I was bent on mischief and followed me, but he wasn't in it on that race. As I came out of my room, I explained to him what I had done, holding the belt in my hand. "Lucky, my boy," was his sapient rejoinder.

We traveled horseback in those days. My medical case and surgical valise were strapped to the rear of the saddle. All saddles had a rear girth breast and breech straps, otherwise they would slip going up and down steep declines. About 9 o'clock, one night, a man called to guide me 9 miles upon the divide. Slipping my trusty gun into my pocket, the guide leading the way, we started up Virginia Canyon; then, swerving to the right, followed a serpentine trail skirting a small gulch bordered by heavy timber. We passed over a ponchon bridge. The guide's horse gave no evidence of alarm but, as I passed over it, some large animal sprang from beneath it, frightening my horse so that he leaped forward with such vigor, that I landed back of the saddle. This scared the lead horse and both tore up the trail at break-neck speed. I regained the saddle and the balance of the trip was uneventful. The cabin was situated right on the summit with a few scattered trees around it. There were five men in the bunch and, believe me, they were a tough looking outfit. Their occupation I did not learn and I didn't care to be too inquisitive. One had typhomalarial fever (Mountain Fever). The cabin was meagerly furnished, dark and dingy with ponchon cots. Having prescribed for the sick man, I waited until daylight before venturing homeward, one of the men guiding me until I reached the main trail. I made several

trips up there after this one and really enjoyed the daylight scenery.

There was much placer mining along the main gulches, those days, and the never-failing flow of water furnished the means by which they washed out the gold. Overshoot wheels were constructed and the water was conducted by small flumes. These wheels, as motive power, operated the sluice boxes into which the "diggins" were dumped, and thus washed out the gold. Traveling up those canyons at night, through dangerous passes and along mountain sides, with precipitous drops of hundreds of feet; the uncanny creaking and squeaking of the water wheels and the possibility of a holdup always kept one on the alert. I always carried my gun in one hand and the reins in the other. Sometimes you pass up into a dense cloud that fairly envelops you, soaking your clothing, finally emerging above into bright moon light. Gazing back, the wavy mist looks for all the world like a sea with its light and dark spots drifting along the mountains. The night I allude to, I was riding an "Outlaw" horse. He grew to like me and we became great friends. As I was descending the trail, I came to a tunnel, or "level," tapping a silver lead. There sprang from the shadows a man, intending to grasp the reins of my horse, but failed to make connection. That horse cleared twenty feet, I do believe, and his plunge came near unseating me. He must have run two hundred yards before I got him checked. Upon another occasion, a Mr. Vivian and I were going up Ute Canyon, one very dark night, to see his sick child. The trail crossed the stream several times and, as we were going around a curve, with overhanging foliage, the horses suddenly stopped. I gazed into the darkness and could outline a man lying across the road. I started to dismount, thinking it was some one hurt, but Mr. Vivian warned me not to and, leading the way, we went around him. After passing him, Vivian said, that was one of the methods employed to hold a man up. Returning later in the night I found the man gone. He might have been a plain, ordinary drunk.

Playing a lone hand in medicine and surgery, in those days, was a serious game. One had to depend on his own resources. You had no dependable counsel to help you. The modern surgeon, with his numerous assistants and

ample facilities, has no conception of what capital surgery means in isolated regions, with only the untutored to help you. In a previous communication, I mentioned a saw-mill. One of the employees had slipped and fallen upon the large circular saw, striking it with his right arm at the wrist, deflecting the member and sawing parallel with the bones, on the inside of the arm, to the elbow. It was a nasty wound. The radial artery was torn and the radial nerve destroyed to about the middle third, the protruding stump of which I amputated. We had only a fine quality of oakum, tarred, which we used as a dressing. In those early days, I practiced good antiseptic surgery but didn't know it. After controlling all hemorrhage, I applied a moist dressing consisting of a 4% solution of permanganate of potash. I placed the limb in extension and kept this solution on for several days; then substituting a carbolized, non-alcoholic calendula application. There was no infection and granulations commenced building as soon as the traumatized tissues sloughed off. The man got along simply fine. It is remarkable how nature reached out and reconstructed those muscles.

It is fortunate that nature oft-times solves a doctor's troubles.

Yep, I started the anesthetic and then turned it over to one of the nerry helpers present. Understand, there were no weaklings in that country. There was no room for that class. We always used chloroform. We were careful, but then didn't appreciate its dangers. I learned this in subsequent years.

One more incident, and I am through. Going up that same Ute Canyon, one morning, a large mountain lion, slowly descending the mountain on the side along which the trail ran, was first seen by my horse. He paused and would go no further. I watched as the animal approached obliquely, leisurely crossing the trail, casting furtive glances in my direction, absolutely unafraid. He descended into the bottom of the canyon, crossed the little stream and ascended the sloping mountain on the opposite side. No, I didn't shoot. I never was that foolish. Green-horns shoot at mountain lions with revolvers. If they live to tell the story, they will advise you never to try it

J. H. LOWREY.

Neola, Iowa.



What Others are Doing

SOMETHING ABOUT HICCOUGH

Hiccough is a very disagreeable affliction even though it sometimes merely causes temporary annoyance, for the reason that it is transitory. Occasionally, though, it becomes distressing and often serious. It has happened that death from exhaustion has been due to a long-continued hiccough.

According to Osler ("Practice of Medicine"), W. Langford Symes groups the causes of hiccough into:

"1. Inflammatory, seen particularly in affections of the abdominal viscera, gastritis, peritonitis, hernia, internal strangulation, appendicitis, suppurative pancreatitis, and in the severe forms of typhoid fever.

"2. Irritative, as in the direct stimulation of the diaphragm when very hot substances are swallowed, in disease of the esophagus near the diaphragm, and in many conditions of gastric and intestinal disorder, more particularly those associated with flatus.

"3. Specific, or, perhaps more properly, idiopathic, in which no evident causes are present. In these cases, there is usually some constitutional taint, as gout, diabetes, or chronic Bright's disease. I have seen several instances of obstinate hiccough in the later stages of chronic interstitial nephritis.

"4. Neurotic, cases in which the primary cause is in the nervous system; hysteria, epilepsy, shock, or cerebral tumors. Of these cases, the hysterical are, perhaps, the most obstinate."

In the *Journal of the Oklahoma State Medical Association* for June, Dr. Forest Dutton, of Tulsa, Oklahoma, reported a case of singultus which, undoubtedly, belongs into the first category of Symes' classification. Dutton justly declares that it is uncommon to observe some twenty or more cases of hiccough in a community at the same time. He says:

"In the fall of 1917, my attention was drawn to an unusual number of cases of hiccough in my practice. Fifteen cases developed in the short period of one week. On inquiry, I found that Dr. N. W. Mayginnis had observed four cases, Doctor Brody three, and Doctor Trainor three. All these cases developed in a period of ten days, and were limited to one district.

"Clinically, these cases presented, chiefly, gastrointestinal symptoms, but the nervous system was greatly involved. The gastrointestinal derangements of epigastric distress, nausea, vomiting, sometimes diarrhea and sometimes

constipation with jaundice, dryness of throat and mouth, and choking attacks, with viscid secretion; and occasionally the nervous symptoms, as dimness of vision, mydriasis, diplopia, suffocating sensations and extreme weakness, were preceded by auras of gastric tension and hiccough. Temperature and pulse were normal or, in the greater number of cases, subnormal. Two cases were fatal; the other patients recovered slowly. The singular fact in these cases was, that the hiccough continued practically during the entire period of the illness.

"Investigations revealed that those affected had eaten a popular brand of sausage. This in every case was followed within twenty-four to forty-eight hours with the symptoms described. In my cases, the intoxication was found to be due to the *B. botulinus*. The others I did not have an opportunity to observe so closely, but, from history obtained, I infer that they were due to the same cause.

"Since 1917, I have had an opportunity to study a number of these cases. The clinical evidence in all of them, after elimination and deduction, convinces me that this endemic of hiccough was due to the *B. botulinus*."

We are familiar with the persistent hiccough that is observed occasionally in the terminal stages of infectious troubles affecting particularly the abdominal organs. We are under the impression that Doctor Dutton's opinion as to the etiology of the affection in his cases is correct. Still, it must be kept in mind that it is not the *B. botulinus* or any other infectious virus as such that gives rise to hiccough. That, we take it, is to be referred more particularly to an intoxication affecting especially the nerve endings and traveling backward, possibly, to the nerve trunks. In botulism, we understand, toxin formation is brisk and the symptoms of intoxication are insistent. It is from that viewpoint that we probably must consider the cases reported by Doctor Dutton.

BUTYN: A SUBSTITUTE FOR COCAINE

A reprint from *The British Journal of Ophthalmology* (July 1922) of an article by William M. Beaumont, of Bath, discusses the merits of butyn which, it will be remembered, was recently introduced as a substitute for cocaine. Referring to the conclusions of the

Committee entrusted with its investigation (*Jour. A. M. A.*, Dec. 10, 1921, p. 1891), Doctor Beaumont relates that his own limited experience with butyn confirms the clinical findings of this committee. He says:

"I have used it in 2-percent solution for the extraction of cataract and for iridectomy, with satisfactory results.

"For the removal of foreign bodies in the cornea and conjunctiva 1-percent solution is usually sufficient to produce anesthesia without causing conjunctival injection and there is never any mydriasis.

"In the treatment of glaucoma, if butyn is combined with eserine, there is seldom any complaint of twitching or discomfort as is sometimes the case when eserine is used alone.

"For all the everyday purposes for which cocaine is used in ophthalmic practice, butyn appears to be an ideal alternative and one which is devoid of the disadvantages of mydriasis and desiccation of the cornea. When used with other medicaments, it is necessary to remember that butyn is incompatible with chlorides.

"I have also used butyn as a lotion to relieve pain in herpes of the head and eye and in detachment of the retina.

"In view of the widespread illegal administration of cocaine, the potentialities of a substitute, devoid of attractions for the drug-taker, should be of value, and, if further investigation confirms all that is claimed for butyn, we may hope that the results will have far-reaching effects in reducing the manufacture and repressing the distribution of a drug, the illicit use of which causes social calamities."

GARLIC AS A HYPOTENSIVE

The Medical Record (Nov. 5, 1921, p. 796) cites a statement from the *Gazette des Hôpitaux* declaring that evidence accumulates that products containing the active principle of garlic are hypotensive. In the laboratory they are able to reduce the tension and slow the pulse for a considerable interval. There seems to be a selective action on the vagus nerve. Tincture of garlic will produce the same result in the clinic on mankind. There has been no suggestion to employ the drug in hypertension and no account of results obtained in that condition.

ZOSTER FOLLOWING TUBERCULOSIS PLEURISY WITH EFFUSION

According to Dr. G. Schreiber (*Bull. Soc. de Pédiat.*, Paris, Jan., 1922), herpes zoster is very frequently due to the tubercle bacillus. He reports two cases.

The first is that of a girl of 14½ years. Serofibrinous pleurisy produced effusion in the

left side of the chest. The skin reaction was positive. Dense adhesions were formed on the left, and an area of zoster appeared on the same side a month after removal of the fluid by thoracocentesis. In the second case, occurring in a boy of 15, the effusion was located on the right side of the chest, the zoster appearing on the left. The crossed condition of the zoster, in the second case, indicated that, if indeed it is caused by Koch's bacillus, it is not a local complication, but is rather the manifestation of a generalized tubercle-bacillus infection. Moreover, zoster may be a precursor of infection, appearing before the occurrence of pleurisy.

We find, regarding the causation of zoster, that Ormsby ("Diseases of the Skin") believes it probable that the idiopathic variety is always due to some infection. While no microorganism specific for this malady has been isolated as its cause, it appears that different ones may be responsible. Experimentally, zoster has been produced by injecting streptococci. It has been recorded as occurring during epidemics such as influenza and varicella. Zoster has been seen in patients afflicted with malaria, eclampsia, focal infection, empyema, septicemia, cerebrospinal meningitis and syphilis.

Aside from infections, traumatism and chemical poisons are the chief causes. It is to be kept in mind that trauma or local disease in the vicinity of the affected nerve may especially have to be held responsible. Zoster has followed poisoning with carbon dioxide and monoxide, also it has appeared after the administration of arsenic (arsphenamine).

A NEW LOCAL ANESTHETIC FOR NOSE AND THROAT WORK

Dr. Albert E. Bulson, Jr., Fort Wayne, Indiana, presents, in his article (*Annals of Otol. Rhinol. and Laryngol.*, March, 1922), a most interesting further study of butyn. He states that:

"As chairman of the committee appointed by the Section on Ophthalmology of the A.M.A. to study local anesthesia in ophthalmic work, I was asked by the Council on Pharmacy and Chemistry of the A.M.A. to submit to the members of the committee some samples of butyn, a new local anesthetic manufactured by The Abbott Laboratories, with a view of determining and reporting upon its efficiency and possible advantages in clinical ophthalmic work. The result of the work done by the committee and the conclusions formed are found in a communication published in the *Journal of the American Medical Association*, February 4, 1922. While butyn was being tested clinically in eye work, it also was being tested rather

thoroughly by the writer and his associates and assistants in nose and throat work, and it is the latter phase of the question which brings forth this communication."

Butyn is a synthetic anesthetic chemically known as paraminobenzoyl gamma di-n-butylamino-propanol sulphate. It is produced in powder form, has a bitter taste, and is very soluble in water. Professor Sollmann of the Research Committee of the A.M.A., says that butyn is two and one-half times more toxic than cocaine when injected hypodermically into albino rats, and Professor Hatcher, of the same committee, says that the fatal dose of butyn when injected intravenously into cats is about equal to that of cocaine, though sublethal doses are more dangerous than with cocaine. Notwithstanding these findings concerning toxicity, Sollmann further states that the results secured by laboratory tests indicate that butyn may take the place of cocaine in whole or in part for surface anesthesia of mucous membranes, and that it may be superior for such purpose to other synthetic anesthetics since it can be used in materially lower concentrations, presumably because of lower absorption. On the other hand, he states that butyn does not appear promising for injection, since the toxicity is materially greater than that of cocaine.

In view of this report, the use of butyn in nose and throat work was undertaken with caution, and, at first, 1-percent solutions were applied once over small areas within the nose and tests for anesthesia made subsequently at one to three minute intervals. These tests indicated a mild surface anesthesia produced within one minute. Later, these tests were extended to include surface anesthesia sufficient for everything pertaining to an examination, including the use of applicators and eustachian catheters, as also for the allaying of the discomfort occasioned by the application of astringents or escharotics. Still later, butyn, in 2-percent solution, by repeated application, was employed routinely in all conditions within the nose and throat where surface anesthesia is desired. Finally, the strength of the solution was increased to 5 percent, with a view of securing anesthesia for all of the major intranasal operations and testing out more completely the penetrating effect of the anesthesia as also the possibilities of bringing about toxic manifestations.

As butyn produces no ischemic effect, there is no shrinking of tissues following its use, such as follows the use of cocaine solutions; hence the condition of the intranasal tissues remains approximately the same except for the anes-

thesia. This is a valuable feature in those cases where a portion or all of a turbinate is to be removed.

The author believes that butyn combined with epinephrin produces a more profound anesthesia than when the butyn is used alone, and the combination has the added advantage of furnishing a relatively bloodless field as well as limiting the absorption of and decreasing the chances of toxic effect of the butyn.

While solutions of butyn in varying strengths of from 1 to 5 percent have been used, yet, it has been found that a 2 percent solution is sufficiently effective in the ordinary cases, and, in view of the possible toxic effects, it is considered unnecessary to use the stronger solutions if the milder will do the work. However, for several months, a 5-percent solution combined with epinephrin has been used routinely in major operations within the nose and throat, with very satisfactory anesthesia, and up to date, without the slightest toxic effects. It is conceivable that, in the throat, where absorption is less marked than in the nose, a stronger solution may, after more extended experience with the anesthetic, prove preferable.

The writer states that his experience with butyn in infiltration anesthesia has been limited, but, so far, has proven satisfactory. For infiltration anesthesia, he has employed butyn in $\frac{1}{2}$ - and 1-percent solution. The former seemed preferable on account of lessened risk of toxic effects.

Under butyn anesthesia, obtained in the manner described, nearly all of the major throat and intranasal operations have been performed, including submucous resections, removal of tumors, turbinotomies, opening of all of the accessory sinuses intranasally, exenteration of the ethmoid cells, removal of adenoid tissue from the nasopharynx, tonsillectomies and removal of benign tumors from the larynx. While all of these operations have been performed under butyn anesthesia, during the last few months, many of them, like submucous resections, many times, in no instance, as already stated, has the patient complained of severe pain, and in nearly all instances the patient has not complained of even real discomfort from the operative procedures. Thus in forty-four consecutive submucous resections of the septum, and twenty-three consecutive intranasal operations on the accessory sinuses, 5-percent anesthesia being employed, the patient in each instance, upon being questioned, declared that the operative procedures had been without pain.

Satisfactory anesthesia for major operations

lasts from thirty to forty minutes, oftentimes longer; and in most cases a fair anesthesia will continue for over an hour. The solutions keep well when not exposed to air, and boiling does not seem to impair their anesthetic efficiency.

TRANSUTERINE INSUFFLATION, A DIAGNOSTIC AID IN STERILITY

Rongy and Rosenfeld, of New York, present, in *The American Journal of Obstetrics and Gynecology* for May, a most interesting paper upon transuterine insufflation as a diagnostic aid in sterility. The authors call attention to the fact that primary as well as secondary sterility are constantly on the increase, Rongy, in the two years preceding August 1, 1921, seeing, in his own office no less than four hundred patients who consulted him because of this condition. He states that sterility due to the husband is on the decrease, and attributes this condition to the campaigns conducted by the medical profession and various public-hygiene agencies. They point out that we have, heretofore, entertained erroneous ideas regarding the mechanical aspect of sterility in the female, and maintain that operations on the cervical canal without definite knowledge as to the condition of the Fallopian tubes are obviously incomplete procedures. It is also pointed out that, if a woman has a cervical canal sufficiently large to discharge the menstrual blood, the canal is roomy enough for a spermatozoon to pass through. But, heretofore, there has been no method by which we could definitely establish the patency of the tubes. They give Rubin, of New York, the credit for really adding this new diagnostic point which they consider definite and certain if properly carried out.

The writers are inclined to believe that, while endocrinology treatment has its place in some of the milder menstrual disorders, it will fail to cure the more severe forms and is of little value in the treatment of sterility. In other words, in their opinion, sterility is not caused by ovarian, thyroid or pituitary disturbances, but by that something which causes that disturbance in these various glands. In other words, glandular disturbance is a terminal condition and is only secondary in nature to some processes in the human economy which alter the normal physiologic functions of these glands. And, it seems to them, that the mysteries associated with functional disturbances will only be solved by a thorough understanding of the biochemical processes of the body.

The technic followed in ascertaining the pat-

ency of the tube by the authors' method is given in their own words.

"The examination must be carried out under the most rigid aseptic precautions. The patient's clothing is removed and she is dressed in an operating gown. She is placed in the lithotomy position. The vagina and cervix are carefully cleansed and the latter is grasped, preferably, by a sponge holder. The cannulae employed are of the Keyes-Ultzman type with a perforation at the tip and several along the sides. The caliber of the cannula used will depend on the size of the cervical canal. The introduction of the cannula will often be facilitated by first determining the direction of the uterine canal with a sound. The apparatus consists of a glass-blown cylinder enclosing a glass siphonometer. This and its attachments can be obtained from Machlett of New York. Before introducing the cannula into the uterus, I make sure that there is no obstruction in the cannula itself. This is usually determined by immersing the cannula in a sterile solution and watching for the gas to bubble through. The cannula is then introduced into the uterine cavity and the gas turned on slowly so that it takes about 15 seconds for the column of mercury to rise from zero to 100 mms. The amount of gas consumed is determined by the reading of the siphonometer which is incorporated in the apparatus. Each 'bubble' approximately represents 37 Cc. of gas. Regurgitation of the gas through the cervix is prevented by the use of a rubber urethral tip, which is fitted over the cannula and snugly inserted into the lumen of the external os. The rise of the mercury in the manometer is carefully watched. In this series, the average rise in the 'patent' cases was 118 and in the 'closed' cases the average rise was 176. If oxygen is used, not more than 300 Cc. should be introduced since oxygen is slowly absorbed and, therefore, is likely to produce pressure symptoms in the right upper quadrant of the abdomen causing pain in the right shoulder. When carbon dioxide is used, a greater quantity can be introduced because of the rapidity with which it is absorbed. The patient is then fluoroscoped in the erect posture in order to see whether gas is present in the abdominal cavity. Usually, the gas is seen in the right upper quadrant under the diaphragm separating it from the liver. A smaller quantity is also visible in the left subphrenic space. With increased experience, one is usually able to foretell by the manometer reading, studying the rise and fall of the mercury column, whether the tubes are patent or not. However, in order to establish a positive diagnosis, the fluoroscope must be employed."

This method of examination must not be used in the presence of acute infections of the vagina or pelvic organs. Neither should it be employed in the presence of chronic affections if the patient complains of pain. In patients who have heart disease, especially when myocardial changes are suspected, the pressure of the gas may seriously embarrass the heart action by raising the diaphragm.

Among the Books

STEVENS: "PRACTICE OF MEDICINE"

The Practice of Medicine. By A. A. Stevens, A. M., M. D. Illustrated. Philadelphia: W. B. Saunders Company, 1922. Price \$7.50.

One would be inclined to think that, at this particular time, there could be little demand for a new work on Practice along regular lines; indeed, the author of such a volume must not only be possessed of considerable courage but feel that he has definite information to impart not ordinarily available. A perusal of Stevens' Practice will fail to reveal any startling departure from accepted methods and ideas; but, the reader will find concise descriptions of diseases which accord with the present state of our knowledge and a good many erroneous or confusing statements (perpetuated in most other textbooks) are conspicuous by their absence.

The author states in his preface that he has not attempted to supply all the information that the internist needs, but he has consulted the writings of many authorities, both American and foreign, and has supplemented the information obtained from these sources by what he has learned himself in thirty years of practice in various hospitals and elsewhere, as well as of teaching, first in pathology and then in internal medicine, and he ventures to hope that nothing of real importance has been omitted, and that the book will be found a trustworthy guide to the practice of Medicine.

The volume doubtless will prove a useful addition to the working library of the general practitioner, even though he possess one or more of the more pretentious—and formidable—"Systems." Stevens is, as far as he goes, at least up-to-date, though his recommendation of dry and wet cupping and sinapism may seem a trifle archaic.

MAY: "DISEASES OF THE EYE"

Manual of the Diseases of the Eye. For Students and General Practitioners. By Charles H. May, M. D. Tenth Edition, Revised. Illustrated. New York: William Wood and Company, 1922. Price \$3.50.

The Reviewer, in the course of a long and busy practice, having found it necessary upon numerous occasions to refer to some really concise and practical manual on diseases of

the eye, learned, long ago, to depend almost entirely upon "May". Therefore, without any hesitation, indeed, with decided enthusiasm, he welcomes this (the tenth) edition which, while retaining its original convenient size, has been carefully revised and contains much additional information.

The confidence the profession has in "May" is evidenced by the fact that the last (ninth) edition appeared in 1917 and was reprinted in 1919, 1920 and 1921. At this moment, an eighth translation, the Chinese, is in press.

You want "May"!

"HOSPITAL ADMINISTRATION"

Principles of Hospital Administration and the Training of Hospital Executives. Report of The Committee on the Training of Hospital Executives. April, 1922.

This report is contained in a pamphlet of twenty-eight pages and relates to the work of a committee appointed by a conference called together by the Rockefeller Foundation, early in 1920, of representative groups from various parts of the United States and Canada. It contains the results of a special inquiry into contemporary hospital practice, organization and tendencies. As for hospital executives, the report recommends that courses of training be inaugurated under University auspices.

We believe that copies of the report may be procured from the Rockefeller Foundation, New York.

"THE USE OF MEAT"

The Use of Meat. By E. B. Forbes, Chicago, Illinois. 1922.

This little pamphlet of twenty-four pages contains digests of scientific literature, and original articles on the nutritive value of meat and its place in diet. The editor, Mr. E. B. Forbes, is designated as "Specialist in Nutrition, Bureau of Public Relations, Institute of American Meat Packers", and the pamphlet is issued by that Bureau, at 509 S. Wabash Ave., Chicago.

The text, as indicated in the table of contents, deals with the nutritive value of meat; meats as sources of vitamins; the mixed diet most efficient; the specific dynamic effect of

protein; meat found better than iron preparations in the cure of anemia; pellagra curable or preventable by meat or milk; the value of meat in the cure of rickets; the formation of urea; causes of gout and rheumatism.

The pamphlet is the first of a series to be published on the physiology of nutrition and on practical dietetics. It takes issue with the tendency to eliminate meat from the diet of both, the well and the sick. In so far, it finds support in the book by Professor Wm. H. Porter, "Eating to Live Long", Chicago, 1920.

BRILL: "PSYCHOANALYSIS"

Psychoanalysis, Its Theories and Practical Application. By A. A. Brill, Ph. B., M.D. Third Edition, Revised. 468 Pages. Philadelphia: W. B. Saunders Company. 1922.

Many physicians are still entirely in the dark as to the meaning of psychoanalysis, and many others regard it as being on trial. The present Reviewer believes that it has accomplished some useful results, notably in cases of neurosis developed by the war. To investigate any subject impartially is scientific; the conclusions arrived at may or may not be that. There is less scepticism today than when Freud first broached his theories.

Professor Brill has made a thorough and unbiased study of the subject in the only effective way—that is, clinically. His book is interesting and helpful, and it is commended to all who feel an interest in the subject. The author depreciates strongly the attempt of any one to apply psychoanalysis without having a thorough clinical knowledge of its methods. The reading of literature alone will not make a psychoanalyst, he avers, any more than reading works on surgery will make a surgeon.

WALMSLEY: "PRACTICAL ANATOMY"

A Manual of Practical Anatomy. A Guide to the Dissection of the Human Body. By Thomas Walmsley. In Three Parts. Part II. The Thorax and Abdomen. New York and London: Longmans, Green and Co. 1921. Price \$3.25.

The Reviewer is compelled to confess that he envies the medical student of today. Gray, a rather dilapidated cadaver and a choleric instructor, made his dissections distinctly onerous and unpleasant.

With such a manual as Walmsley has produced, the work would have been easy, if not fascinating; and, while one might think that nothing particularly new could be said upon

the subject, the author has proven the contrary. If there can be any justifiable criticism of the book, it might perhaps be directed towards the illustrations. These might, with advantage, be more numerous and a little less "sketchy".

DUNNING: "SUBMUCOUS RESECTION OF NASAL SEPTUM"

The Submucons Resection of The Nasal Septum. By W. Meddaugh Dunning, M. D. New York: Surgery Publishing Company. 1921.

This little volume of one hundred pages will probably be consulted more often by the average rhinologist than many of the more pretentious books. The author has something to say, and says it in a clear, definite and informative manner. The outline plates illustrate each step of the operation perfectly and are well worth more than ordinary study.

INFORMATION FOR PROSPECTIVE MOTHERS

The Maternity Center Association, 370 Seventh Avenue, New York, recently published a series of helpful talks to prospective mothers and their husbands. These talks are very brief, each one covering about four clearly printed pages. They are concise and to the point. The salient information given is, that a baby's life does not commence with its birth but with conception, nine months prior to it. The importance is stressed that the mother's body should be kept at its highest possible perfection in order to assure a healthy baby.

The information in this little series of talks is very sensible, helpful and wholesome. Emphasis is laid on the necessity of consulting a physician, at least for examination, even though a midwife may be employed for confinement. The prospective mother is further counseled, very wisely, to remain under the doctor's care and, perhaps, under the nurse's supervision during her time of pregnancy.

It seems to us that these little talks are very useful and that physicians might well hand sets of them to their expectant mothers. The price is 25 cents per set, in a stout paper envelope.

BYRD: "FORTY NOTIFIABLE DISEASES"

Forty Notifiable Diseases. A simple discussion of the more important communicable diseases. By Hiram Byrd, B. S., M. D. Yonker-

on-Hudson. World Book Company. 1922. Price 60 cents.

This little book is written in accordance with the present-day tendency to educate the public in matters of hygiene, of disease-prevention. "Upon the theory that hygiene should ultimately eliminate premature deaths and unnecessary suffering and, at the same time, promote human efficiency", the author says, "it seems logical to direct our formative efforts toward the points that are most likely to yield immediate returns". He believes it advisable for people to acquire a "thinking knowledge" of the notifiable (that means, the communicable) diseases and a working knowledge of nutrition and elimination.

The book deals very concisely with "germs" and with those diseases that are due to their action; the author informs his readers also of the fact that there are "good germs", which are necessary and which accomplish important work. His diction is popular, even elementary, and physicians may well make use of the booklet for the information of their patients. We have read it through with much interest. By the way, there are two errors on the first page. The Greek word for "over" is not *hypers* but *hyper*; that for "under" is not *hypos* but *hypo*. This correction should be entered in a later edition.

FAIRBAIRN: "OBSTETRICS AND GYNÆCOLOGY"

Obstetrics and Gynæcology. Edited by Johns S. Fairbairn, M.A., B.M., B.Ch. London: Oxford University Press. 1921.

In this country, the number of textbooks on obstetrics is so great that the announcement of a new one is generally received with a sigh of weariness. Most of them have no excuse for existence except to advertise the author. In Great Britain, the number is fewer, and the average quality higher, though our best will compare favorably with their best.

The Reviewer believes that it is more difficult for the inexperienced obstetrician to find practical and efficient help in the books today than it was forty years ago, because the textbooks at that time, limited in number, were prepared by men of long experience and, what is of much more importance, men who understood the art of teaching.

The real test of value of a textbook on this subject is the way it answers the question, what help can the doctor with a bad case find here, expressed clearly and concisely?

This present book is one of the Oxford series, and is on the symposium plan. A number

of the ablest obstetricians and gynecologists of Great Britain have contributed the various articles. Applying the above-mentioned test in half a dozen instances, gives very satisfactory results, and therefore the reader can feel assured that this work maintains the high standard of the series.

JANSEN: "FEEBLENESS OF GROWTH"

Feebleness of Growth and Congenital Dwarfism with Special Reference to Dysostosis Cleido-Cranialis. By Dr. Murk Jansen, O.B.E. London: Oxford University Press. 1921.

"Physical Science has risen from empiricism to its present height by the discovery of laws or parallelisms which are visible to the mental eye only, and when they are grouped and correlated, they create order out of the seeming chaos which Nature presents."

"To the orthopedic surgeon this work is an earnest endeavor to display the laws and rules by which a large number of deformities are determined and, in some cases, also the means by which they may be forestalled."

These quotations from the foreword of this interesting little work give a very clear idea of its field and tenor. Among the various causes of retarded growth discussed by the author, the part played by amniotic pressure will come as a new idea to many readers. His development of this phase of the subject is clear and convincing, and worthy of careful study.

Murk Jansen won the gratitude of the allies during the war by his sympathetic care of their soldiers and sailors interned in Holland.

TILNEY AND RILEY: "CENTRAL NERVOUS SYSTEM"

The Form and Functions of the Central Nervous System. An Introduction to the Study of Nervous Diseases. By Frederick Tilney, M.D., Ph.D. and Henry Alsop Riley, A.M., M.D. Foreword by George S. Huntington, Sc.D., M.D. 1020 Pages. 763 Illustrations. 56 Colored. New York: Paul B. Hoeber. 1921. Price \$12.00.

This is a notable contribution from Columbia University to our knowledge of the central nervous system. The two authors and the writer of the Foreword are all on the Faculty of that institution. It would, perhaps, not be too much to say that this work is the last word on a very extensive subject, whose development has been rapid of late years and which has especially been greatly stimulated by the experiences of the Great War.

There is a noticeable trend in modern medical

education towards recognition of the fact that morphology, physiology, and biochemistry underlie all sound ideals of medical education, and this book is an expression of that trend so far as it relates to the central nervous system.

The work is well written, and is far from being the dry dissertation which our textbooks on the nervous system formerly were.

SCHAEFFER: "THE NOSE"

The Nose, Paranasal Sinuses, Nasolacrimal Passageways, and Olfactory Organ in Man. A Genetic, Development, and Anatomico-Physiological Consideration. By J. Parsons Schaeffer, A.M., M.D., Ph.D. 204 Illustrations, 18 in color. Philadelphia: P. Blakiston's Son & Co. 1920. Price \$10.00.

This is a very complete study, embryological, and anatomico-physiological, of the olfactory organ of man, including the paranasal sinuses and naso-lacrimal passageways. It is a work of great value to the general practitioner and, more particularly, to the nose specialist. It is based upon extensive laboratory work, done at Cornell and at Jefferson. One of the most valuable features is the attention which the author gives to variants. The importance of variation from type would seem self-evident and, yet, many writers give their attention chiefly to types, in spite of the fact that a large proportion of pathological conditions are caused by variation from the typical. In reality, there are very few thoroughly typical human bodies.

The book is a fine example of press work.

ELLIOT: "CARE OF EYE CASES"

The Care of Eye Cases. A Manual for the Nurse, Practitioner and Student. By Robert Henry Elliot, M.D., B.S., Sc.D., F.R.C.S. Illustrated. London: Oxford University Press. 1921.

While this is a book written primarily for nurses, it is also complete enough to be of much value to the doctor and the student. The author's aim is to make his own work more successful by making the nurse more intelligent. He reasons that she will work more enthusiastically and more efficiently if she has some idea of what he is trying to accomplish. In other words, he believes that blind obedience to orders, however conscientious it may be, is inferior in its results to that obedience which has some foundation in knowledge of anatomy, physiology and pathology. Writing with this object in view, the author has produced a very readable and practical little volume which will

be appreciated by those who do eye work. It is worthy of the Oxford University series.

BATTLE CREEK SANITARIUM BULLETIN

The Bulletin of the Battle Creek Sanitarium and Hospital Clinic. Issued Quarterly by the Medical Faculty of the Battle Creek Sanitarium, Battle Creek, Mich. Volume XVIII, March, 1922. No. 1.

The latest issue of this bulletin, which initiates the eighteenth volume, contains the following articles that are of general interest.

The Relation of Arterial Hypertension to Nephropathies, by M. A. Mortensen, M. D.

Safety Methods in the Care of Surgical Patients, by J. H. Kellogg, M. D.

A Preliminary Study of the Ocular Findings in Cases of Abnormal Metabolic Rate, by Louie V. Stegman, M. D.

Non-Tuberculous Pleurisy, by J. S. Pritchard, M. D.

Basal Metabolism: Its Significance, Diagnostic Importance and Methods of Estimation, by Paul Roth, M. D.

Transduodenal Biliary Drainage a Valuable Diagnostic and Therapeutic Measure, by Charles E. Stewart, M. D.

Progress and Promise in the New X-Ray Treatment of Cancer, by James T. Case, M. D.

We are naturally interested in Doctor Roth's discussion of the basal metabolism, also in Dr. Case's communication regarding the new x-ray treatment of cancer, although the other articles in this number are by no means without great interest and merit.

WILSON: "CIRCULATORY DISEASE"

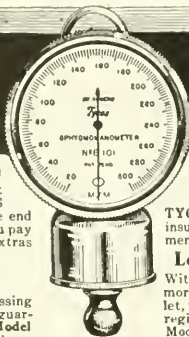
The Clinical Study of the Early Symptoms and Treatment of Circulatory Disease in General Practice. By R. M. Wilson, M.B., Ch.B. With a Foreword by Sir James Mackenzie. London: Oxford University Press. 1921.

This is one of the "Oxford Medical Series" and is fully up to the high standard for which they are noted. The comprehensiveness of the work is indicated by the full title as given above. First, it is a Clinical Study; second, the Early Symptoms and Treatment are of the greatest importance; and thirdly, it is in General Practice that this knowledge is most needed, because very many patients can not avail themselves of the help of the specialist.

The foreword by Sir James Mackenzie is alone a most valuable contribution compressed into a few words.

Any physician who feels the need of aid on his cardiovascular cases will find this book well worth study.

RENT THIS TYCOS



NINE MONTHS THEN IT'S YOURS

Easy Rental Purchase Plan

By our easy rental purchase plan, after a first payment of only \$2.50 we will rent this TYCOS to you for nine months at \$2.50 a month, at the end of which time it is your absolute property. You pay only the cash price—with no interest and no extras—and have

Nine Full Months To Pay

Just dignified credit. No red tape or embarrassing questions. You take no risk. We absolutely guarantee this genuine Dr. Rogers' New 1922 Model TYCOS and it is also fully guaranteed by the makers.

Standard Of The World

There is only one standard of the world—reliable—dependable—accurate—and that is the TYCOS, which has been adopted and is used by all insurance companies, the United States Government and medical authorities.

Leather Case and Booklet Free

With each TYCOS we give you free a handsome morocco leather case and a 44-page instruction booklet, which tells exactly how to use it. The TYCOS registers both systolic and diastolic pressures. Modern scientific diagnosis demands the aid of an accurate instrument for determining blood pressure.

Dr. Rogers' Genuine 1922 Model Self-verifying Sphygmomanometer

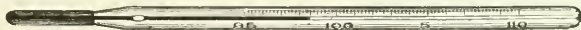
Cash Price Everywhere \$25 But we will send it to you upon receipt of only \$2.50 and allow you ten days free trial. If then you wish to keep it, simply pay the balance, \$22.50, in nine small monthly payments of \$2.50, and the instrument is yours. You cannot buy it for less anywhere else. You cannot buy it on such easy terms except by the Aloe Easy Rental Purchase Plan.

Ten Days Free Trial Just enclose first month's rent—\$2.50—and we will ship the TYCOS at once. Try it thoroughly for ten days. Give it every test you can. If you are willing to part with it, send it back at our expense and get your money. If pleased, then pay only \$2.50 a month for 8 months. **SEND FOR YOUR TYCOS TODAY.** Do it NOW. Let it PROVE its usefulness to you. It is so easy to own that you'll never miss the money.

A. S. ALOE COMPANY,

559 Olive Street, ST. LOUIS, MO.

THERMOMETER INSURANCE



Regrets don't help after the damage is done through the use of faulty clinical thermometers. The time to take precautions is when you are purchasing. Make sure then that you are receiving tested clinicals, guaranteed by a reputable house.

You are thoroughly protected when you buy Betzco Clinical Thermometers. Each instrument carries an unqualified guarantee of accuracy. Each thermom-

eter is tested and retested by Government standards; those that vary, plus or minus 2/10 at 100° and 104°, or 3/10 plus or minus at 96° and 108° are rejected. Only the perfect thermometers are sold.

Then, too, Betzco Thermometers are easy to read. The scales measure not more than 10 degrees to the inch and the markings are clear. The tubing is thoroughly seasoned and without flaw. In every way, they justify our price.

JUST FILL IN AND MAIL THE COUPON TODAY

FRANK S. BETZ COMPANY HAMMOND, IND.

Enclosed is \$6.50, for which you may send me 1 dozen 3CM5151, Betzco guaranteed and tested Clinical Thermometers, which I may return if not well satisfied.

Name

Address

City..... State.....

P. S.—I have not yet received your general catalog No. 22

Mark cross in blank, if catalog has not been sent you.

News Notes Department

The time may come yet when the doctor will be paid for advice quite as often and willingly as he is customarily paid for an actual prescription or a bottle of medicine, at the present time. Even today the more intelligent of people appreciate advice of the sort that assists towards the prevention of disease or the use of agencies other than medicinal. And such people have a very high regard for the doctor whose advice, from experience, is usually reliable.

At times his advice is wanted on matters not properly or immediately in his province. For instance, he is often asked to recommend a dentifrice, from the hundreds that are advertised. Which shall it be? If familiar with Pepsodent it probably will be that dentifrice and no other. A full tube is offered to any doctor who writes for it. (Use the coupon in our advertising pages.) The makers are anxious that every doctor shall learn the merits of Pepsodent from personal use.

This is the day of soft drinks, as are called the numerous beverages which contain no alcohol. Since the latter were legislated out of the market new and strange alcoholless drinks have been brought out by opportunists, but it

is noticeable that the ones we knew before the war are most popular, probably because they deserve it, because they are time-tried, because they have continued for long to satisfy the great public.

One of them is grape-juice, Welch's of course. It is truly an excellent beverage, not only from the fact that it satisfies the thirsty, and is particularly refreshing on hot summer days, chilled with a little ice and served thus plain and undiluted or with carbonated water, half and half, but from the fact that it contains nutriment and real food value. With this additional asset grape-juice becomes an article in the dietary of the sick, that is quite acceptable and wholesome, when during anorexia or fever or gastric distress there is call for special feeding.

Time was when cathartics, even the best and most worthy, were misused and abused. So they are today, although less often. The careful prescriber now uses cathartics more circumspectly.

With a proper diet much can be done against constipation. Bran, from the outer coatings of the wheat kernel, is one of the things apart from drugs that may be utilized in constipated persons. It may be used as a breakfast



"Gland Transplantation Held Success"

—News Item.

In Gonadal Insufficiency

Few physicians are willing to submit their patients to the uncertainties and difficulties of such an operation. Many have found that they are able to reach effectually the endocrine dysfunction responsible for such conditions as **Impotence**, **Presenility**, **Senility**, etc., by the use of **ORCHO-LYMPH COMPOUND** (Mayson). It is a potent and rational combination of orchic, adrenal and lymph glands, together with glycerophos, co., lecithin, and nux vomica 1/10 gr. to the dose. (Supplied without nux if so specified.)

ORCHO-LYMPH COMPOUND (Mayson) has given results of so brilliant a nature in **Impotence** and **Premature Senility** that many physicians consider it as a specific in these conditions.

ORCHO-LYMPH COMPOUND (Mayson) is used with marked success in **Neurasthenia**, **Brain and Nervous Disorders**, **Locomotor Ataxia** and **Paralysis Agitans**. The beneficial results from its use in the **Run Down** and **Convalescent Conditions** from any cause are certain and permanent.

Package of 100 tablets in sanitary glass vials.
(5 vials of 20 tablets each to the box), \$3.00

Booklet containing useful
information on organother-
apy, free.

The Mayson Laboratory

5 South Wabash Ave.

CHICAGO

The Foetus as a Mineral Parasite—

IT has been definitely established that during gestation the foetus acts as a mineral parasite.

If the mother's diet during these eventful months is deficient in mineral salts imperatively demanded for the development of the mineral structure of the child, the deficiency is made up at the expense of the mother's tissues.

This brings about a corresponding loss of vitality both for the mother and for her prospective offspring.

It is for this reason that a liberal quantity of Grape-Nuts with milk or cream will be found of value in the diet of expectant mothers; to provide an adequate mineral content in the mother's blood during the period of utero-gestation, and also an adequate mineral content in her milk during the subsequent period of lactation.

The high food value of Grape-Nuts is shown by the fact that Grape-Nuts contains 95.25% of solids, including 11.88% of protein; 78.76% of carbohydrates (of which 48.24% is soluble, as dextrin, reducing sugars, etc.) and 2.27% of mineral salts.

These salts include:

Potassium chloride . . .	4.55%	Calcium phosphates . . .	5.42%
Sodium chloride . . .	34.33%	Magnesium phosphates . . .	24.20%
Calcium sulphate . . .	1.96%	Iron phosphate . . .	0.62%
Potassium phosphates . . .	22.87%	Silica	2.02%

Grape-Nuts with milk or cream is well suited for supplying the elements required by the developing child; it is admittedly a good all-round food for the mother.

Samples of Grape-Nuts, for individual and clinical test, will be sent on request to any physician who will write for them.

Postum Cereal Company, Inc.,
Battle Creek, Michigan, U.S.A.

cereal. The best and most suitable for regular fare is Kellogg's Bran. Some brans are too coarse. Kellogg's Bran is just right. Served with milk or cream, with or without sugar, it is not only edible but relishable. One easily grows to like it.

The logic of eating bran is simply expressed by saying that it furnishes bulk, when mixed with alimentary secretions, which the intestine needs for a normal peristaltic movement. A large part is unabsorbed (being cellulose) but bran contains mineral salts that are vital to health.

No physician who is awake to the responsibilities his calling imposes upon him undertakes to get along without the customary laboratory aids to diagnosis. In the large cities he has ready access to them. But in the smaller towns and country districts, away from them, he finds himself somewhat at a disadvantage. And still, in a way, that is to say, through the medium of the mails, the best facilities of the city are his.

He may send his specimens, along with pertinent data, to any of the National Pathological Laboratories. These are located in five cities. Please see our advertising pages for addresses. Suitable sterile containers for shipping specimens are free to anyone applying, together with full explicit instructions for collecting and mailing.

Electrotherapy. Data on the many uses of the sinusoidal current, up to the present time,

have been altogether too meagre. Yet there is a keen interest among physicians in the positive results obtainable therewith, and every new publication which affords such information is heartily welcomed.

We are therefore glad to see the brochure published by the Ultima Physical Appliance Co., 186 North LaSalle St., Chicago, and mailed by them gratis to inquirers. It gives a lot of useful information in small compass. We like its brevity. The salient working facts are available to the reader without his being required to wade through a mass of unessentials.

After four years of the most painstaking research, Professor John Uri Lloyd has completed for the American Drug Manufacturers' Association a work whose very nature makes it monumental, namely, the "*Origin and History of All the Pharmacopoeial Vegetable Drugs, Chemicals and preparations with Bibliography*," the complete history of all the botanical drugs that have ever appeared in the United States Pharmacopoeia. The book assembles a lot of scattered facts; runs into 449 pages; and is sold for \$6.00 which scarcely more than covers the actual cost of publication.

The edition is small and a limited number of copies are obtainable through the office of the American Drug Manufacturers' Association, 507 Albee Building, Washington, D. C.

Intestinal Diseases. Referring to its use as an antiseptic and antifermentative, C. D. Aaron

For the Doctor Who Wants Results

we supply a number of practical, ethical products such as **PULVOIDS NATRIUM COMP.**, which is rapidly becoming recognized as the most reliable and effective combination for reducing high blood pressure and maintaining normal tension.

Salvarols Suppositories

Rectal

require no technique and obtain action and results equal or superior to arsphenamine intravenously injected.

Pulvoids Aurazyme

No. 418

in conjunction with other indicated measures secure satisfactory results in diabetes mellitus. A trial will convince.

ENDOCRIN AND GONAD products, a complete line, at reasonable price, and of premier quality.

Send for literature, case reports, price lists and our little periodical "Drug Products," gratis to physicians.

THE DRUG PRODUCTS CO., Inc.

153 Meadow Street

Long Island City, N. Y.

Outing Infections

Summer Uses of Dioxogen

As an Antiseptic

For cuts, lacerations, abrasions, and all open wounds.

As a Lotion

For ivy poisoning, sunburn, chafes, and skin irritations.

As a Spray and Gargle

For colds, sore throat, eye infections and as a mouth cleanser.

As a Compress

For strains, sprains, contusions and swollen muscles.

As an Internal Remedy

For gastro-intestinal ills, diarrhea, etc., from changes in food and water.

As a Water Purifier

For routine addition to all drinking water used from brooks, springs and wells.

Many a physician has saved an outing from ending badly by his advice to carry a supply of Dioxogen in the first aid kit.

Directions

Locally — A teaspoonful of Dioxogen to five to eight of water makes an ideal antiseptic lotion.

Internally — One half to a teaspoonful of Dioxogen well diluted, stops fermentation, gastric irritation and pain at once.

are complications that—like specters at the feast—always stand ready to spoil the annual vacation that means so much to those who live and work in the city.

Simple cuts or abrasions, the bites or stings of insects, a severe sunburn, dermatitis from poisonous shrubs, are all apt to lead to graver conditions, if neglected or improperly treated.

Medical men who have learned from many gratifying experiences how serviceable

Dioxogen

is, as a non-toxic, non-irritating but thoroughly dependable antiseptic, have no difficulty in promptly relieving the immediate effects of these emergency afflictions of the vacationist and preventing the development of infection.

The large amount of pure uncontaminated oxygen—nature's own antiseptic—which Dioxogen brings directly to the point of injury, in its most active form enables the practitioner to accomplish results in the direction both of healing and of prophylaxis that cannot be expected from germicidal measures of a toxic or irritating character.

At no time of the year does the physician find the special advantages of Dioxogen a greater source of satisfaction than during the Summer and Fall months. A bottle on the surgical dressing table or in the doctor's bag is a bulwark against the many simple but none the less dangerous emergencies that are prone to occur throughout the outdoor season.

The Oakland Chemical Co.

59 Fourth Avenue, New York City

in his Diseases of the Digestive Organs states that "Ichthyol is said to prevent decomposition quite well. It may be given as an albuminous compound, Ichthalbin, which has the advantage of being tasteless and insoluble in acid gastric juice. The dose for children is 0.1 to 0.3 Gm. (2 to 5 grains) and for adults 2 Gm. (30 grains) several times a day."

Turning to astringents, the author writes that "the astringent best known and most extensively used is tannic acid. The tannin albumin compounds are insoluble in acid media and are therefore not acted upon by the acid gastric juice but in the alkaline intestinal secretions a sufficient amount of nascent tannin is liberated. Tannalbin, a compound of this class, is prepared by heating tannin and albumin; it contains 50% of tannin. The beneficial effect of this compound in diarrhea is recognized. The dose for adults is 1 Gm. (15 grains) and for children 0.5 Gm. (7 grains) several times daily."

The combined use of Tannalbin and Ichthalbin in summer diarrhea has often been recommended by physicians.

The belief that cancer is not entirely a local affection, and that in all probability it is brought about by a depraved condition of the blood, seems to be gaining converts.

A factor is acidosis. This condition is established first and cancer develops as a result. It is very important therefore that foods which produce acids to an excess greater than can be

properly neutralized by the body should not be eaten; nor should an excess of salt be used on the food, since it excites inflammation in the tissues and might lead to the development of cancer. Raw vegetables will assist nature in correcting some of the evil effects brought about by a too generous diet of protein and carbohydrates.

A list of raw foods is given by the National Bio-Chemical Laboratory, of Mt. Vernon, N. Y., in their suggestions for diet suitable for the treatment of cancer and acidosis. Physicians who are interested in the treatment of these diseases from the viewpoint of dietetics might write to the Laboratory for this list.

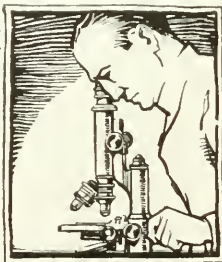
Within ten years or so many physicians have taken to administering by means of the hypodermic syringe drugs which formerly were given only by mouth. The idea, while still young, is appealing to the most conservative. For seemingly it is supported by sure ground. It appears valid. And, what is more, it is working out clinically in terms of results.

So far as distasteful drugs are concerned, the palate is spared, wherefore one cannot but regard the hypodermic way as a kind innovation. Nor is there gastric irritation. Drug action is not defeated by the digestive fluids. And, above all, effects are obtained promptly, especially when injections are made into the veins.

Arsenic, strychnine and phosphorus are advantageously given in this way. The prepara-

ADVISORY BOARD

DR. GEORGE DOCK,
Washington University, St. Louis.
DR. OTTO FOLIN,
Harvard Medical School, Boston.
DR. LUDVIG HEKTOEN,
John McCormick Institute, Chicago.



DIRECTORS OF LABORATORIES

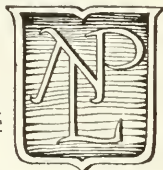
DR. ARCHIBALD McNEIL,
New York.
DR. J. J. MOORE,
Chicago.
DR. R. L. THOMPSON,
St. Louis.
DR. PAUL G. WOOLLEY,
Detroit.

AUTHORITY

Wherever you are and whatever your pathological facilities, check up occasionally with the NATIONAL Wassermann Test, Blood Chemistry, Tissue Diagnosis, Bacteriological and Clinical pathological work. Containers with full instructions sent free on request.

NATIONAL PATHOLOGICAL LABORATORIES, Inc.

CHICAGO: 5 South Wabash Avenue
NEW YORK: 18 East 41st St.
DETROIT: 910 Peter Smith Bldg.



ST. LOUIS: University Club Bldg.
SAGINAW, MICH.: 302 S. Jefferson St.
Dr. Homer S. Warren, President.

KELLOGG'S BRAN

*for
stubborn cases
of constipation*



In a natural, easy way, Kellogg's Bran, cooked and krumbled, induces better peristaltic action. When two tablespoonfuls are eaten each day, permanent relief can be confidently anticipated in mild cases. Kellogg's Bran will be found particularly valuable in chronic, old-age and bed-ridden cases, when two tablespoonfuls in some form should be taken with each meal.

Kellogg's Bran is delicious. It should not be confounded with common brans which become so irksome for patients to eat. Kellogg's Bran has a nut-like flavor and krumbled crispness that appeals to the most fastidious appetite. It may be eaten as a cereal, sprinkled on other cereals or used in countless ways in baking and cooking. Recipes are printed on each package.

We are anxious that physicians should test Kellogg's Bran to personally know how good it is and to know the results that can be expected. Kindly mail a post card today to Kellogg Toasted Corn Flake Co., Battle Creek, Mich., and a full-size package will be promptly mailed you.

An Analysis of Kellogg's BRAN cooked and krumbled

Aside from its regulatory value, Kellogg's Bran commands attention as one of the most valuable foods known. Read this analysis:

Moisture	2.50
MINERAL SALT	8.41
Protein	15.8
Fat	2.8
Crude Fiber	8.9
Carbo-hydrates	61.6
Calories	1480.46
(per pound)	

Kellogg's

*Look for
this signature
H.K. Kellogg*

the original BRAN - cooked and krumbled

tion known as Injection Clin (E. Fougere & Co., Inc.) affords all three drugs in the same dose.

A doctor practicing in Mexico uses an ointment containing Chlorazene against sores prevalent there from insect bites. He also employs the antiseptic in a kind of itch common in that country. And always, says he, it serves him well.

Such an ointment application is excellent, as hundreds of doctors in our own states know, for small wounds, cuts, ulcerations, etc., which come in the day's work. It is also fine for bedsores, sunburn, ivy-poisoning, as well as scalp irritations, with excessive dryness, dandruff and falling hair.

An ointment made with a non-greasy base is supplied by The Abbott Laboratories, Chicago. It is called Chlorazene Surgical Cream in their catalogue.

The public is easily deceived by demagogues, nostrum peddlers, professional reformers and others of that ilk, this from the fact that few think for themselves and on their own account. And so, we often find the public going wrong, mislead, committed to the silliest prejudices, taking seriously things that properly ought to be laughed out of the world.

For example, consider the subtly instilled prejudice against coffee, that good old-fashioned beverage without which a breakfast is a hollow affair. In recent years coffee has

been singled out, next to tobacco and rum, for persistent attack. The most dreadful slander has involved it. We have been warned against it as from an iniquity of the first order, a wrecker of health, a bearer of poison, a despoiler of complexions.

No doctor should allow himself to be so mislead. If coffee is bad for some it is certainly good for many others. In fact, to advise certain patients to give up their coffee, from the notion that coffee is bad for everybody, is beneath the gabblings of an ignorant midwife.

Sexology: What is called by a critic well equipped to pass authoritatively on this class of literature, "the best book published in any language," is now being circulated to physicians. Copies may be had from the Council Service, 257 West 71st Street, New York City. The price is \$6.00 reduced for the present from \$7.00, the original price. The book, we understand, will be sent to any doctor subject to return after five days, if not considered well worth the outlay.

The author is Dr. Iwan Bloch, a well known medical figure and a writer of considerable talent.

Poor man. Man has a hard time getting through the world in some degree of comfort. From birth on he is threatened with no end of disease enemies. Always he has one or another to combat. One of his troubles around middle

The Management of an Infant's Diet

A Rational Procedure in Summer Diarrhea

For Infants of any age

Mellin's Food

4 level tablespoonfuls

Water (boiled, then cooled)

16 fluid ounces

Give one to three ounces every hour or two, according to the age of the baby, continuing until stools lessen in number and improve in character.

Milk, preferably skimmed, may then be substituted for water—one ounce each day—until regular proportions of milk and water, adapted to the age of the baby, are reached.

Mellin's Food Company, Boston, Mass.



Golden Key Gives Coffee a Better Flavor

Many people prefer Golden Key Milk to fresh cream for coffee. There's a rich, smooth taste about Golden Key which seems to blend delightfully with the flavor of good coffee.

In a test recently conducted, 24 families were given numbered cans of Golden Key and four other leading brands of evaporated milk, with the labels removed. *Eighteen out of the 24 chose Golden Key for first place on taste, color and appearance.*

You will probably like Golden Key better than any milk you have ever used. Use it in coffee, in cooking, over cereals—in fact, wherever you would use fresh, whole milk. Recommend it to your patients.

Look for the Key on the Can

GOLDEN KEY MILK

Pure, Rich Milk — Concentrated!

life is pyorrhea, which makes dreadful inroads on his disposition, his pleasure and his general health. We are just beginning to know that pus collections under the gums are responsible for many conditions of ill health which the bewildered diagnostician of the past laid to other causes.

The disease can be prevented, we are assured, by taking it in hand early under the supervision of a competent dentist. The weapon recommended is Pyorrhocide, a dentifrice especially designed for use against this ailment, which is early manifested by soft receding gums, that bleed easily even with the slightest brushing.

In this connection, to adapt for our use the old saw we all know, it is as true as can be that one tooth cared for in time may save a whole set of incisors.

The menopause age in Finland does not directly interest us but if it will throw any light on the troubles affecting our own women it will repay investigation. A large part of the doctor's time is given to relieving or trying to relieve a set of distressing symptoms appearing at the menstrual periods and climacteric. Few young females in the cities go through the months without more or less distress, especially among those who have to be constantly upon their feet, as do saleswomen, factory workers, etc.

In many, examination reveals anatomical defects. But surgery is frequently out of the question and non-surgical treatment must be

resorted to. Viburno (Beach) is a useful preparation, affording as it does several effective remedies.

Interest in glandular preparations and their use for supplementing the diminishing production of the several hormones in man, when coming with age or other causes, is still keen. Especially do we seek to combat senile changes by supporting the work of the sexual and associated glands. So too, a number of physicians are turning to this means for correcting such sad defects in young adults of both ages as frigidity, impotence, etc. And in many instances quite remarkable results are reported to have been obtained.

But care must be taken in the selection of one's preparations, since some are practically inert. The Cavendish Chemical Corporation, 295 Pearl St., New York City, supply several items of this class, we understand, that are reliable.

Washington. President Harding recently received in the White House, the Medico and Pharmico Club of Cleveland, Ohio. The delegation numbered 120 prominent physicians and pharmacists, as well as members of the graduating class of Western Reserve University College of Pharmacy. They travelled in large sight-seeing auto-busses, via the Lincoln Highway across the Allegheny Mountains.

On the way they passed through Philadelphia, and inspected the Laboratories of H. K. Mul-

TESTOGAN

For Men

Formula of Dr. Iwan Bloch

After eight years' clinical experience these products stand as proven specifics.

INDICATED IN SEXUAL IMPOTENCE AND INSUFFICIENCY OF THE SEXUAL HORMONES

They contain SEXUAL HORMONES, i. e., the hormones of the reproductive glands and of the glands of internal secretion.

Special Indications for Testogan:

Sexual infantilism and eunuchoidism in the male. Impotence and sexual weakness. Climacterium virile. Neurasthenia, hypochondria.

Furnished in TABLETS for internal use, and in AMPOULES, for intragluteal injection.

Prices: Tablets, 40 in a box, \$1.75; ampoules, 12 in a box, \$1.80

EXTENSIVE LITERATURE ON REQUEST.

CAVENDISH CHEMICAL CORPORATION

Sole Agents

Established 1905

295 Pearl Street

New York

THELYGAN

For Women

Special Indications for Thelygan:

Infantile sterility. Underdeveloped mammae, etc. Frigidity. Sexual disturbances in obesity and other metabolic disorders. Climacteric symptoms, amenorrhea, neurasthenia, hypochondria, dysmenorrhea.

If You Were The Patient!



IF you were the patient, what would you want from your doctor? Quick relief, yes; treatment, of course; and, if possible, permanent cure of the condition or disease which brought you to the doctor or the doctor to you.

But isn't there something else? Wouldn't you want this relief, this treatment, this cure with as little derangement of your normal mode of living as possible? Certainly you would, and you would be grateful for any consideration which imposed only *necessary* hardships. Being sick is punishment enough!

But what are you doing when you unreservedly rule Coffee from the dietary of every patient without first justifying such a dictum by the facts in *each particular case*? Aren't you, in the great majority of cases, imposing an unnecessary

hardship? Aren't you very, very frequently taking the zest from the morning meal without true reason? And most important of all, aren't you perhaps overlooking a possible therapeutic aid?

Professor Percy G. Stiles, of Harvard University, in his book, *Human Physiology*, distinctly says: "It is impossible to prove that Coffee is harmful for the great majority of people"; while Dr. Oliver T. Osborne, of Yale University, in his book, *Therapeutics*, says: "In many acute cases and especially in typhoid fever, and often in pneumonia, a morning cup of Coffee is advisable."

We believe that if your cases were charted you would find very few, indeed, in which Coffee would be contra-indicated. We believe, too, that the chart would bring out the fact that Coffee could frequently be enlisted as a therapeutic aid.

Joint Coffee Trade Publicity Committee, 64 Water Street, New York, N. Y.

When writing Advertisers please mention The American Journal of Clinical Medicine

ford Company. They also viewed the botanical gardens which are being conducted by this Company in collaboration with the Philadelphia College of Pharmacy.

From Philadelphia, the party proceeded to Baltimore and Washington, where the reception by their fellow Ohioan, President Harding, took place. There was a luncheon, where a number of prominent speakers were heard.

The new disinfectant known as Izal promises to be as popular in this country as it is in England, where for years it has been the choice of the Admiralty for use on shipboard, in naval stations, etc. The Abbott Laboratories, Chicago, are now making it for home use, as well as for export to Cuba and Mexico.

The great advantage it has over the old-type tarry cresol preparations, till now so common with us, is that it is a clean milk-white fluid without disagreeable odor. It will mix with any water, hard, soft or otherwise, and therefore is suitable for any locality. It does not stain fabrics.

With all that it has efficiency, being at least twelve times more powerful than carbolic acid. A sample bottle may be had free by writing the laboratories.

Something new. A new obstetrical table is announced by the Nesmoht Sales Company, 210 Arthur Bldg., Omaha, Neb. Those who have seen it describe it as a wonder, for convenient features, practicability and office utility

eclipsing all other tables up till now in use. Physicians will welcome it since it makes their work easier, facilitating examinations as well as local treatments.

A request addressed to the selling agents named above will bring a descriptive circular.

A treatment for drug and alcohol addict cases, which can be carried out in the home under the doctor's supervision, has been developed by Dr. Quayle, based on many years of experience with such cases. Those interested may direct their inquiries to Box 7, Madison, Ohio.

We understand that his method is an effective one, accomplishing results in a short time, with the minimum of distress for the patient during the withdrawal process, or undue depletion of his vitality. A successful home treatment as this purports to be is bound to interest a number of our readers and lead them to investigate.

Uterine pains of the spasmodic type are usually overcome by fairly large doses of one of the benzyl compounds. Other or purely congestive types do not respond so well. In either case it is wise to put the patient on some such preparation as Hayden's Viburnum Compound; if this is not given continuously, it should at least be ordered for the ten or fourteen days prior to the expected menstrual flow.

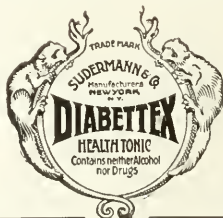
This preparation of viburnum opulus and synergistic remedies is an old and favorite one

A Treatment for Diabetes (Mellitus) That Is Really Making Good DIABETTEX

Purely a vegetable compound. "free from added sugars, starches, preservatives, saccharin, alcohol, narcotics, habit-forming drugs and deleterious substances." (From report on analysis by the Analytical and Bacteriological Laboratory of Bendiner & Schlesinger.)

The checking up of cases through analysis by the Physicians Diagnostic Laboratory (with which we have no connection) reveals a gradual reduction of sugar elimination, one case having been reduced from 6% to "absent" within six weeks. Details of cases on request owing to our gratuitous co-operation through laboratory urinary analysis, it is recommended that, where possible or convenient, the physician send his patients to us for the filling of prescriptions for Diabettex.

DIABETTEX is advertised to physicians only and is never sold to patients direct. Interesting literature, to be had for the asking.



DIABETTEX comes in the form of a powder, which is dissolved in water for use.

Sudermann & Co., Inc.
237 Lexington Ave.
NEW YORK CITY, N. Y.

Liquid Petrolatum in Dyschezia

Liquid petrolatum has distinct value in the treatment of dyschezia (rectal constipation), particularly following surgery. An authority of international note points out that the effect of the anaesthetic and traumatism often cause an unavoidable disturbance of nerve plexi and induce an obstinate variety of constipation. He states that liquid petrolatum is the logical as well as the effective treatment, since it prevents drying out of the feces, helps re-establish normal regular defecation, absorbs and removes toxins.



Dyschezia—A, dilated ampulla of rectum; B, hypertrophied rectal valve; C, sigmoid.

From "Diseases of the Digestive Organs,"

by CHAS. D. AARON,
Sc.D., M.D. F.A.C.P.



A NORMAL COLON

NUJOL offers unsurpassed advantages of viscosity, purity and suitability in all conditions of intestinal stasis.

The viscosity and specific gravity of Nujol were fixed upon after exhaustive research and clinical test, in which many consistencies were tried, ranging from a thin fluid to a jelly. The viscosity of Nujol is closely adapted to human requirements and is in accord with the opinion of leading medical authorities.

That the value of Nujol to the medical profession is generally recognized is attested by its use by physicians and in hospitals the world over.

Sample and authoritative literature dealing with general and specific uses of Nujol will be sent gratis upon request.

For Constipation

Nujol

REG. U.S. PAT. OFF.

A Lubricant; not a Laxative

Guaranteed by Nujol Laboratories, Standard Oil Co. (New Jersey), 44 Beaver St., New York.

with a great many physicians, from whom not a few hymns of praise have issued from time to time, telling us that it does give relief in most of the cases. It is made in the laboratories of the New York Pharmaceutical Co., of Bedford, Mass., to whom inquiries should be addressed.

Dr. D. A. Kuyk, of Richmond, Va., inquiring about a new product, writes: "I hope it will prove as good as your Aromatic Chlorazene Powder, which is easily superior to any preparation I have yet used." Address The Abbott Laboratories, Chicago, Ill.

A name everyone knows in England, at least every doctor and chemist, is Izal. In that country Izal is the leading disinfectant. It is the disinfectant specified by the Admiralty for use on shipboard, in naval stations, etc. It has also the official preference of the Japanese government. And public health officials in many parts of the world are using it. The distinction of introducing it to American users has been given to The Abbott Laboratories, Chicago, who will manufacture it not only for home use but also for Mexico and Cuba.

A milk-white emulsion of the higher phenols, Izal has advantages over the tarry cresol preparations up till now in use. Compared to carbolic acid or to chloride of lime, it is about twelve times more powerful. (A 1:500 dilution will disinfect a typhoid stool in fifteen

minutes.) Nor is it dangerously poisonous as are most strong disinfectants.

Izal mixes freely with any water and so can be used in any locality. For sinks, vaults and foul-smelling urinals it is just the thing. There is sure to be a large demand for it.

Hay fever is now a large contributor to the world's troubles. Perhaps the symptom that distresses the patient most of all is intranasal congestion, which may be so severe as to obstruct one or both passages completely or nearly so, making breathing difficult. This is usually worse at night, if aggravation be possible at all, and not a few while the season lasts and it necessary to pass whole nights propped high on pillows.

Relief comes only by obtaining an opening of at least one of the nasal passages. An expedient of value for this purpose, among the astringent agents at the doctor's disposal, is Suprarenalin Solution, 1:1000. In many cases its application to the nose by swabbing or spraying is almost instantly effective. With a great many doctors this is in fact the chief reliance. Armour & Co. have been supplying it for years.

A change from aspirin. The extent to which aspirin is used, almost wantonly, by lay persons, or in other words self-prescribed, is being cited in the medical journals. Extensive advertising to the public by certain manufacturers of the drug has made it popular. It is regarded as singularly sure and at the same



"Nature supplies in the liver of the cod an elaborated fat digested, ready for use, diffusible through animal membranes, the best of all foods."

HYDROLEINE

is the ideal form, emulsified, without drug addition, the best food-medicine in **Anemia, Chronic Rheumatism, Nervous Disease, Diabetes, Chronic Bright's, Phthisis, Suppuration, Children's Diseases.**

HYDROLEINE is pleasant to taste, perfectly digestible, pronounced in action and effect.

*Send for sample and booklet,
"New Light on an Old Remedy"*

Century National Chemical Co.
86 WARREN STREET
NEW YORK

Every Doctor Can Now Make His Own Blood Tests

Through a Method Originated and Endorsed by
Prominent Physicians

After years of research and experimentation, Dr. A. M. Roman, Ph. B., M. S., M. D., has perfected a blood resistance test whereby the practitioner can secure scientific aid in the diagnosis and prognosis of disease. By experiments proven on about 15,000 cases, it has been found that the ROMAN BLOOD RESISTANCE TEST, in a few minutes' time, will give the information that a blood count, opsonic index or specific blood test would give.

The ROMAN BLOOD RESISTANCE TEST is a test the physician can perform in his office or at the bedside with one drop of blood from the patient's finger. The test will indicate the presence or absence of specific diseases, thus serving as a guide for treatment.

The principle of this test is that "all abnormal functions of the human body manifest themselves in a lowered or raised resistance of the blood, and that this alteration in the resistance is caused by chemical changes in the blood which chemical changes are specific for the factor causing it." The ROMAN BLOOD RESISTANCE TEST demonstrates the alterations in the resisting power of the blood and so throws light upon the etiological factor of a number of diseases.

No matter what the causative factor may be, the successful treatment of a case does not imply only the elimination of the disease-producing factor, but also the restoration of the normal resisting power of the blood. It then becomes evident that the determination of the resisting power of the blood is an essential guide in the diagnosis and prognosis of all diseases.

This is exactly what the physician avails himself of through the use of the ROMAN BLOOD RESISTANCE TEST. The variation in the resistance of the blood has not

only proved to be indicative of specific diseases but, in addition, the principle of "relation between diseases and blood resistance" makes the reliability of this test an accepted fact.

Roman: *The American Journal of Clinical Medicine*, April, 1922, page 253, and Collins: *The American Journal of Clinical Medicine*, May, 1922, page 334, have dealt with the subject in detail and have firmly established the reliability of the test.

The ROMAN BLOOD RESISTANCE TEST outfit is put up in a compact leather case which may be carried in the pocket. It includes: one folding leather case containing twelve 1-Cc. ampules of the reagent used to perform the test, two test tubes, one puncturing spring lancet, a pipette for measuring one exact drop of blood, one rubber suction tube with glass mouthpiece, one three-edged file and complete directions showing how to make the test and how to read results.

The process is extremely simple and is 100% efficient. The price of the ROMAN BLOOD RESISTANCE TEST set is \$20.00 and is sold under an absolute guarantee. If the purchaser makes a test according to directions and treats the patient for the condition indicated by the test for a reasonable period of time, without noticeable improvement, the outfit may be returned and a refund of full amount paid will be made.

Hundreds of physicians are reaping the benefits of the ROMAN BLOOD RESISTANCE TEST. You can use it with advantage in your practice. Its value to you cannot be measured in dollars and cents. For \$20.00, an outfit will be sent you postpaid. Additional ampules of the reagent can be secured as needed, at \$10.00 the dozen. Send in your order direct to

The Standard Medical Research Products Co.

SUITE 920-928

108 North State Street

Chicago, Ill.

time safe for the relief of pain, pain of any and every sort, pain anywhere and everywhere. Instead of consulting the doctor, many people thus obsessed fly to the drugstore for a box of aspirin tablets.

But aspirin is not the sure, safe thing people suppose. As recklessly taken it is a heart depressant from the fact that it accumulates with constant use and decomposes into phenol-like bodies which are decidedly toxic. The adrenals are greatly harmed by aspirin; heartburn after a dose indicates that.

Prescribers may well use less of it or refrain from giving it entirely. Many are prescribing Atophan instead of aspirin and the salicylates. This is a Schering & Glatz item and strictly ethical.

A good gift. We note with interest that the Marvell Pharmacal Co., 31 Union Square West, New York City, has just made a donation of about \$2,000.00 worth of quinine formate ampules to the Russian Famine Fund. In view of the scarcity of drugs in that impoverished country, this was indeed a good gift, given we are sure in the true humanitarian spirit.

The Marvell Pharmacal Co. was a pioneer in America in the business of making glandular preparations for medicinal use and, what is more, this firm is reported to have made the very first polyglandular preparation marketed in the United States. It is still listed. The formula is: pituitary, 5%; ovarian, 40%; thyroid, 10%; testicular, 45%. Polyglandular

Solution is the name it is known by. Many new products of the same sort have appeared since but old users, satisfied with results, show no inclination to change their prescription.

The transplantation idea. It is by no means new. It has only been lost and now has been found, as one may say. The question is, will gland transplantation become a vogue, attain popularity, establishing itself at last as something worthy of permanence. Being a surgical operation, entailing the use of the knife, this may be doubted. It is described as a small operation, not dangerous to life. But it is surgery just the same.

Besides it is said on good authority that presenile and senile conditions can be combatted quite as effectively by giving a testicular preparation in capsules or tablets, by mouth. Many physicians are now giving Orcho-Lymph Compound (Mayson) and meeting we understand with success. This is from the Mayson Laboratory, 5 South Wabash Ave., Chicago. It is sold in glass vials containing 20 tablets, 5 vials to the package.

Who would think of practicing medicine without a thermometer? And what doctor today, in the front rank at least, and awake to the new developments in his work, attempts to diagnose cases without a blood pressure apparatus? Both are indispensable.

There are several of the latter on the market. One of the best known is the Tycos. It

The Nurse's Comfort

—next to that of the patient—is always to be kept in mind and should be provided for.

Take alcoholic massage for instance.

Some (most) "rubbing alcohols" have a repelling odor, equally distasteful to the patient and the nurse.

Not so with "Alkolave".

It has the clean, pleasing odor of grain alcohol; **it is grain alcohol specially denatured.**

Salutary externally—poisonous internally.

In 4-oz. and pts. only; at most good drug stores.

Particular physicians prescribe it. Do you?

"Alkolave"

SHARP & DOHME



Indigestion:

Its Symptomatic Relief

DOCTORS are sometimes surprised to learn that Taka-Diastase is an excellent symptomatic remedy in many cases of *proteid* indigestion. Although its effect in these cases is indirect, it is nevertheless gratifying.

Taka-Diastase seems to liquefy the starchy elements of the stomach contents, giving the gastric juice free access to the proteid food which would otherwise be encased in a rather impervious starchy mass.

That explains why Taka-Diastase or a combination of Taka-Diastase and Pepsin is a favorite prescription of many physicians in cases in which the digestive functions need a little temporary help.

Of course, in cases of amylaceous dyspepsia—marked deficiency of ptyalin or amylopsin or both—Taka-Diastase is the outstanding indication. It steps into the breach at once and carries on the disturbed digestive process. The patient gets rapid relief from the distressing symptoms.

The dose of Taka-Diastase in powder, tablets or capsules is 5 grains, to be taken immediately after meals. Liquid Taka-Diastase, an extremely palatable hydro-alcoholic solution of Taka-Diastase, is usually prescribed in doses of one to two teaspoonfuls.

New literature gladly sent physicians on request: THE 1922 CATALOGUE TYPHOID VACCINES—GLAND THERAPY. Write to our nearest branch: Detroit, New York, Chicago, Kansas City, Baltimore, New Orleans, St. Louis, Minneapolis, or Seattle.

Parke, Davis & Company

is used by nearly all the insurance companies and by most of the state institutions, according to report. The A. S. Aloe Company, 559 Olive Street, St. Louis, sell it. Or they will rent it to any physician by the month, the rentals applying on the purchase price, so that in nine months the renter owns the apparatus. See details in our advertising section.

A revival of interest in the subject of gland transplantation followed an operation of this sort in Chicago last month. As it happened, the patient was one of the citizenry whose every move is observed by reporters and chronicled in the newspapers.

The incident gives rise to a crop of questions. Is gland transplantation to become the fashion among those in middle life who can pay the surgeon's fee? We must wait and see. And may not equally good results as are claimed for this operation be had from the use of Hormotone and similar preparations given by mouth? Many believe so. Many say they are getting good results from two to six tablets per day.

Hormotone is a pluriglandular preparation. It comes from the laboratories of the G. W. Carnrick Co., 410 Canal Street, New York City.

Doing x-ray work. To be practicable for routine use by the average physician, an equipment for this work must not be too expensive, too complicated, too cumbersome. The average physician is busy. He rarely has any

talent for mechanics. And, finally, he has no great fund of money to spend.

The "Type R" outfit which the H. G. Fischer Co., 2337 Wabash Avenue, Chicago, are offering seems to merit investigation. The manufacturers recommend it highly for practical radiography. It is said to give the best and clearest of pictures, while well within the average means to acquire and to operate.

Acriflavine continues to attract users, the verdict of whom is that it is a valuable new asset in genito-urinary practice. It appears to terminate an attack of gonorrhea in less time than other germicides employed by injection or irrigation. Presumably this is due to its exceptional penetrability.

An increasing number of physicians are prescribing it by mouth, as a urinary antiseptic. For this purpose, however, only a pure and strictly highgrade salt should be prescribed, such as that supplied by The Abbott Laboratories, Chicago. Their Acriflavine more than meets the tests for purity required by the Council on Pharmacy and Chemistry of the American Medical Association.

This firm is supplying tablets of suitable grainage both for making solutions and for oral use.

The time has passed when the doctor can practice his profession with no more equipment than a scalpel and a fever thermometer. It is not enough in these days to uncover the fact

Is it never safe to take anything for granted?

Take dropsy for example. Regardless of the underlying cause, cardiac valvular lesions with loss of compensation, chronic Bright's disease, Post Scarletinal Nephritis, or what not,—effusion of fluid into the tissues means increased cardiac burden, augmented circulatory stasis, resultant renal irritation and increased absorption of toxic waste. More than a mere diuretic is required.

ANASARCIN TABLETS act upon the heart and strengthen its action and regulate its rhythm.

ANASARCIN TABLETS help to overcome circulatory stasis and so bring about absorption of effused fluid.

ANASARCIN TABLETS increase elimination of urinary fluids as well as fluids.

Such action is demonstrable. Why not convince yourself by trial?

Sample and literature on request.

The ANASARCIN CO.

Winchester, Tenn.

Drink in the Dietary

DRINK in the dietary must be considered. Frequently large quantities of liquid are contra-indicated—but still there is the *thirst* to meet!

If you could give your patients a beverage that would quench their thirst, satisfyingly, with small liquid bulk, and at the same time have the added recommendation of real food value, wouldn't you be quick to prescribe it?

Of course you would!

Welch's Grape Juice is indorsed by leading and conservative physicians everywhere, and is used extensively in hospitals throughout the country. It quickly allays thirst; it aids in tissue building and repair. Why? Because the grapes used to make Welch's analyze—

Water	77.4%
Protein	1.3
Fat	1.6
Carbohydrates	19.2
Ash	0.5

The carbohydrate is invert sugar, or as Yeo expresses it, "grape sugar is predigested carbohydrate."

Welch's

THE NATIONAL DRINK



The Welch Grape Juice Company, Westfield, N.Y.

that his patient has fever or that his bowels are inactive. The art of diagnosis is not quite so simple. Of equal and even greater import is it to determine, at least in chronic cases, what the blood pressure is and the metabolic rate.

We are just beginning to realize how important it is determine if metabolism in a given patient is proceeding properly, if it be normal, or under or over the rate commensurate with healthy organic existence. With this information the doctor is able to do things. If the metabolic rate is under the normal he can stimulate it by thyroid feeding, for instance. If over the normal, his task will be that of slowing or depressing it with the means at his disposal.

The Sanborn Company, of Boston, make an apparatus for determining the metabolic rate. It is portable and handy for office or bedside use, easy to operate, and yet accurate as any of the larger or more expensive appliances in the market.

No trifle. Details are not necessarily trivial. Often they count tremendously. So far as the doctor is concerned, as with many others, success depends very largely on attention to such small affairs in the life of a patient as some may unwittingly ignore. This capacity for details is indeed characteristic of big men.

For instance, it may not seem important, to the average, whether his neurosthenic patient wears leather heels or rubber heels. This, nevertheless, may be one of those little things that count. Whether a desk-worker uses a hard

pencil or a soft one may seem insignificant. But it may not be so. And again in a rectal case, the choice of a toilet paper may even engage one seriously. There are times when one may recommend with advantage Sani-Tissue, for example, an especially soft cloth-like paper made by the Scott Paper Co., of Philadelphia.

Hay Fever Again. The new book by Scheppegrell, a recognized authority on the subject, confirms the view that much of the misery borne by the patient is caused by pyogenic bacteria following the irritation begun by pollen, rather than by the pollen itself. Also, as a consequence, that vaccine treatment once the attack has begun, is really the important thing.

It is interesting to recall that Sherman, of Detroit, was first to bring this important fact forward, which he did a number of years ago. And is it not reasonable that pyogenic bacteria are ready at all times to invade accessible tissues and likely to make serious trouble when the normal resistance of these tissues has priorly been undermined by irritants?

The vaccine recommended by Scheppegrell is practically the same as Sherman's stock vaccine No. 36, the use of which during the course of the disease is said to check or modify the symptoms in a most gratifying way.

"What you say about the Shoe Horn is good common sense. Mine worked splendidly last night. Please send another to Dr. Whitney."

THE SEXUAL LIFE OF OUR TIME

By IWAN BLOCH, M. D.

Physician for Diseases of the Skin, and for Diseases of the Sexual System, in Charlottenburg, Berlin. Author of "The Origin of Syphilis," Etc. Translated by M. Eden Paul, M.D.

"A veritable encyclopaedia of the sexual sciences."

It is invaluable to both specialist and general practitioner because, in addition to throwing new light on the well-defined problems of the former, it strips many baffling cases met with in every-day practice of their deceptive characteristics and reveals the hidden roots of sexual disorder or irregularity.

A LITERARY AS WELL AS SCIENTIFIC ACHIEVEMENT

Dr. Bloch is a master of style. His book is so well written, so colorful, so vitally absorbing, yet without so simply told that it would be of immense profit to the layman—BUT FOR ETHICAL REASONS IT IS RESTRICTED TO THE MEDICAL AND LEGAL PROFESSIONS.

The price of the book is \$7.00. However, we are allowing physicians 10% discount, making the price \$6.30. WE ARE THE SOLE DISTRIBUTORS OF THIS BOOK AT THIS DISCOUNT. Remittance by check, money order, cash or stamps; or sent C. O. D. if desired.

5 DAYS' TRIAL

If not satisfied, return book within 5 days and money will be refunded

"The best book on sexology ever published in any language in the world."—Wm. J. Robinson, M. D.

An investigation of sex and sex manifestations, both normal and pathologic, which not only marks a new epoch in the treatment of patients, but which will be regarded as an authority for countless years to come. This book has had a remarkable popularity. During recent nine months' period, the sales necessitated six re-printings.

800 PAGES

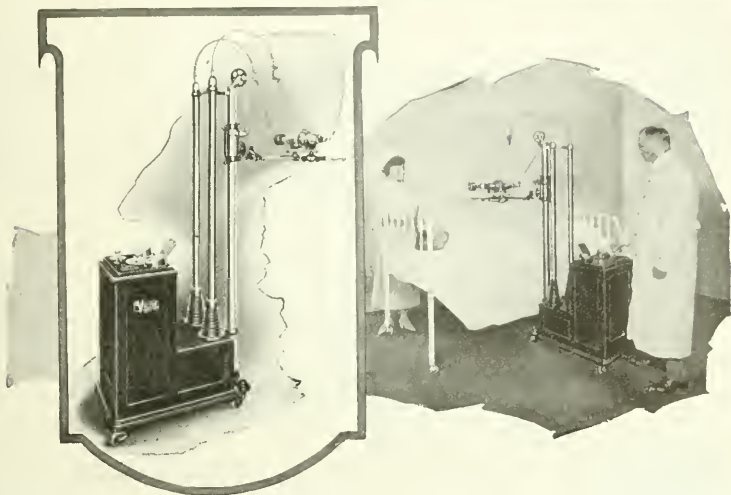
33 CHAPTERS	
I. The Elementary Phenomena of Human Love.....	7
II. The Secondary Phenomena of Human Love (Brake and Senses).....	19
III. The Secondary Phenomena of Human Love (Reproductive Organs, Sexual Impulse, Sexual Act).....	37
XIX. The Riddle of Homosexuality—Appendix: Theory of Homosexuality.....	487
XX. Pseudo-Homosexuality (Greek and Oriental Paederasty, Hermaphroditism, Bisexual Varieties).....	537
XXI. Alogagnia (Sadism and Masochism)—Appendix: A Contribution to the Psychology of the Russian Revolution (History of the Development of an Alogagnistic Revolution).....	555

ONLY PART OF CONTENTS

XIII. Prostitution—Appendix: The Half-World.....	303
XIV. Venereal Diseases—Appendix: Venereal Diseases in the Homosexual.....	349
XV. Prophylaxis, Treatment and Suppression of Venereal Diseases.....	371
XVI. States of Sexual Irritability and Sexual Weakness (Auto-Erotism, Masturbation, Sexual Hyperaesthesia and Sexual Anesthesia, Seminal Emissions, Impotence, and Sexual Neurosthenia).....	407
XVII. The Anthropological Aspect of Psychopathic Sexuals—Appendix: Sexual Perversions Due to Diseases.....	453

XII. Seduction, the Sexual Life, and Wild Love.....	279
XXII. Sexual Feticism.....	609
XXIII. Acts of Fornication with (Children, Infants, Acts of Fornication with Corpses (Necrophilia) and Animals (Bestiality), Exhibitionism, and other Sexual Perversities—Appendix: The Treatment of Sexual Perversities.....	631
XXIV. Offenses Against Morality from the Forensic Standpoint.....	659
XXV. The Question of Sexual Abstinence.....	671
XXVI. Sexual Education.....	681
XXVII. Neo-Malthusianism, the Prevention of Conception, Artificial Sterility and Artificial Abortion.....	693
XXVIII. Sexual Hygiene.....	709

To obtain a special \$6.30 price and 5 days' trial orders must be sent direct to Counsel Service—Med. Dept. 153, Distributors of Scientific Medical Works, 257 W. 71st., New York



This New Victor X-Ray Outfit Is Radically Different It Is a Stabilized Mobile Unit

What the Stabilizer Does

When the voltage of the line supply current fluctuates (this condition prevails on practically every line) the Victor-Kearsley Stabilizer, incorporated in this unit, acts *automatically* to hold the milliamperage constant in the Coolidge Tube—the exact milliamperage desired for the radiograph. 100% radiographic results are therefore insured—no “retakes” necessary because of fluctuating line supply.

Control Features

Auto-transformer allows selection of any penetration desired from 3 to 5 inches, divided into 26 steps—a fineness of graduation that is distinctive in this outfit. The stabilizer permits selection of any milliamperage from 2 to 30, at any setting of the auto-transformer. A chart on the control board helps the operator to obtain instantly any current value.

The Victor-Kearsley Stabilizer is one of the most important X-Ray developments since the advent of the Coolidge Tube itself. It should not be confused with other devices which tend to stabilize only the current to the filament of the tube. The important advantages of this unit are fully explained in a special bulletin, which we will gladly send you on request.

Circuit Breaker Safety Device

In case of “overload” beyond the capacity of the tube (30 Ma. at 5” back-up spark) this device *automatically* shuts off current supply, preventing damage to tube and apparatus. Consider also the importance of this from the standpoint of protection to both operator and patient, in case of accidental contact with the high tension system.

A Complete X-Ray Unit

Where only limited space is available in the physician's office, the compactness of the Victor Stabilized Mobile X-Ray Unit solves the problem. Mounted on casters and easily moved about, it lends itself to varied demands. It also becomes an extremely valuable addition to any existing hospital equipment.

VICTOR X-RAY CORPORATION, Jackson Blvd. at Robey St., Chicago
Sales Offices and Service Stations in All Principal Cities



Food values are often sacrificed by cooking. Overcooking frequently spoils a good steak, making it hard to digest, less nutritious and less savory than it should be. From which it is plain that there are arguments favoring a raw food dietary.

For the sick person hampered by serious disease of the alimentary tract, which interferes with digestion, and the convalescent, as well as the aged, who must have nourishment in forms that are easily metabolized by the organism, the elements of red meat may be provided in such a preparation as Bovinine. In many cases this serves in a way that is most satisfactory. If any of our readers are strangers to the expedient they should write for a sample and reports in reference to it. For the address of the Bovinine Company, see our advertising pages.

The preparation named contains serum, hemoglobin and plasma salts expressed intact from beef, and is thus a highly concentrated food in ready form.

Diabetes. Something of a stir has followed the announcement by Sudermann & Co., 237

Lexington Ave., New York City, of a new drug treatment for diabetes. Their views are given in a pamphlet now being distributed to physicians, who are asked by way of trial to send for what the chemists call Diabetex, a preparation said to give good results in a larger proportion of cases than any available in the past.

A sufficient quantity will be sent to any physician, evincing an interest in it, to carry one average case through to a conclusion. So sure are its sponsors that they have something of real value against this unruly disease!

Huston Brothers Co.,
30 E. Randolph St., Chicago, Ill.

Gentlemen: About a year ago I bought of Dr. A. J. Willits of this city, one Huston Baird's Air Cushion Pessary. It has given me such relief that I am lost without it. I have nursed for 15 years and I have never come across just such a support as the one you have. I wish all women needing care had one of them. I recommend them wherever I am.

Mrs. N. S. Smith.

Anaconda, Mont., R. 1.



A Private Maternity Home

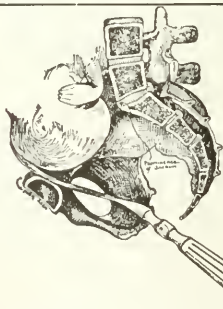
ESTABLISHED 1886

A PRIVATE RETREAT FOR UNFORTUNATE GIRLS AND WOMEN DURING PREGNANCY AND CONFINEMENT, WITH EVERY FACILITY FOR THEIR CARE AND PROTECTION.

Especially adapted to cases wishing to avoid publicity. Homes found for infants by adoption when desired.

67 FOR PARTICULARS ADDRESS

MRS. L. YOUNG, 4496 Laclade Ave., ST. LOUIS, MO.



Very Helpful in Child Birth

Huston's Obstetrical Blade or "Shoe Horn" is really a unique invention

Where the foetal head engages against the Symphysis pubes instead of emerging directly toward the birth canal, this instrument is worth its weight in gold. The head of the foetus may be readily deflected toward the canal. Eliminates hours of suffering. Price \$5. Money back guarantee.



Only a Nickel

Full supply "Neverslip" for thirty cases at only a nickel each. Send us \$1.50 and we will ship at once prepaid. You will say that Neverslip is your best aid in obstetrical technique. The only round cord that will not slip, will not cut and will always hold. Get the genuine. Specify "Huston's."

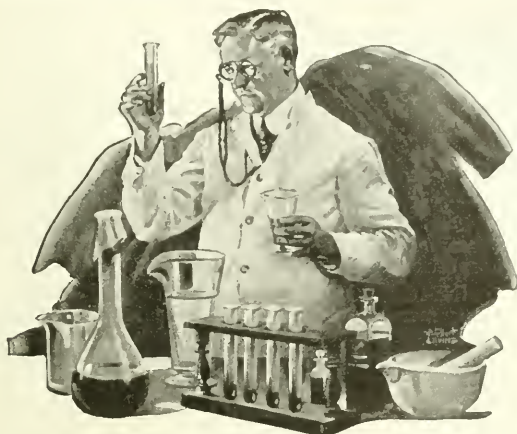


Huston's Comfort-U-Supporter (WASHABLE)

is unsurpassed in cases of enteroptosis, gastroptosis, floating kidney and post-operative conditions, requiring support. It relieves dragging on the solar plexus and frequently restores to vigorous health; also helpful in many cases of confinement. Retail prices: 6" width, \$6.00; 7" width, \$6.50; 8" width, \$7.00; larger sizes proportionately higher in price. A discount of 25% is allowed physicians. Washable. Durable. Economical.

HUSTON BROS. CO., 30 RANDOLPH STREET, CHICAGO, ILL.

Complete Lines of Physicians' Supplies



Get the Truth

If any question occurs about Pepsodent, please ask for the facts.

Pepsodent is now used nearly all the world over. In every country it has met the approval of dentists and dental authorities.

It is based on modern principles, now generally accepted.

For seven years it has been subjected to tests which, we believe, have answered every question in its favor. So it is fair to assume that Pepsodent is right.

Modern requirements

Pepsodent complies with the requirements fixed by modern research.

Instead of being alkaline—based on soap and chalk—it is mildly acid in reaction. Thus it reverses old effects.

It stimulates the salivary flow. It increases the ptyalin in the saliva, to better digest starch deposits on teeth. It increases the alkalinity of saliva to better combat mouth acids.

It combats the mucin plaque on teeth in two effective ways.

Right in all respects

Of course Pepsodent differs from the tooth pastes it supplants.

The absence of soap—a lubricant—makes the polishing agent conspicuous. But it is not severe. It is softer than the enamel. Natural teeth have been brushed with Pepsodent 250,000 times without any ill results.

The mild acid reaction has to some suggested a possible harm. But this is disproved by natural teeth immersed four years in Pepsodent mixed with saliva. So with every possible question.

We have able men to answer questions. We have scientific bulletins for those who seek the facts. And we gladly send a tube for test to physicians who mail coupon.

Pepsodent PAT. OFF.
REG. U.S.

The Modern Dentifrice

A scientific tooth paste, mildly acid, which brings five desired effects.

THE PEPSODENT COMPANY,
1802 Ludington Bldg., Chicago, Ill.

927

Please send me, free of charge, one regular 50c size tube of Pepsodent, with literature and formula.

Name

Address

Enclose card or letterhead

Nutramine

Norwich Vitamin Concentrates

A physiologically tested and standardized preparation representing the three vitamins—fat-soluble A and water-soluble B and C—in concentrated form.

Two NUTRAMINE Pills have practically the same vitamin B content as a fresh yeast cake combined with proportionate amounts of A and C.

INDICATIONS: Malnutrition, under-development, faulty metabolism, rickets, skin diseases and scurvy. During convalescence or when the diet is restricted, NUTRAMINE Pills will assist in correcting the vitamin deficiency.

Literature upon request

ADDRESS: MEDICAL DEPARTMENT

The Norwich Pharmacal Company

Norwich, N. Y.

New York

Chicago

Kansas City

Rx



O'Sullivan's Heels.
, Pair

*Fig— Apply properly, in
place of leather heels,
and wear regularly, to
avoid the gas in walking,
prevent excessive fatigue,
and promote foot
comfort and health.*

A Careful, Md.

O'SULLIVAN
RUBBER CO., Inc.
New York

Often Overlooked

ADHERENCE to some pet theory of feeding may blind a physician to its fallacies, or bias his viewpoint so that they are overlooked.

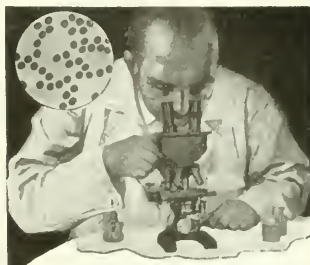
Physicians who insist upon the home modification of cow's milk sometimes fail to consider the inability of the average mother to follow properly a complicated formula. They overlook the probability that the purest milk may sour in hot weather, become tainted by other food in a refrigerator, or be contaminated through carelessness.

You can eliminate these dangers for your patients by prescribing a food of protected purity which is easily prepared by the most inexperienced mother and which can be kept pure under the most trying conditions.

NESTLÉ'S MILK FOOD is pure cow's milk modified by the addition of malt, cereals, and sugar and then reduced to powder form. It is milk, free from pathogenic bacteria, in a form which is easily prepared and readily digested.

Send for free samples to Nestlé's Food Company, Nestlé Building, New York City, or 112 Market Street, San Francisco.

NESTLÉ'S MILK FOOD



Isotonic

Bacteriologists always find that

Dr. R. B. Waite's
ANTISEPTIC
LOCAL ANAESTHETIC

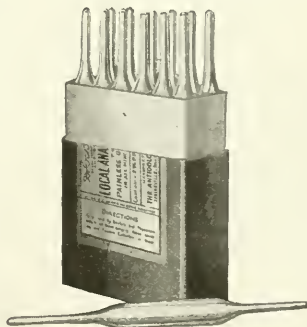
is assimilated readily by the blood.

Sold in bottles and ampules. The ampules are hermetically sealed—won't deteriorate—will keep indefinitely. Are ready to use. The individual ampules please patients.

\$1.00 box for 25c

Send 25c to pay the cost of packing and shipping and we will send you \$1.00 box of ampules for your own tests.

THE ANTIDOLOR MFG. CO.,
12 Main St., Springfield, N. Y.



Trade
Mark**STORM Binder and Abdominal Supporter**

(PATENTED)

Trade
MarkTrade
Mark

It is two supporting belts in one—a body part and a reinforcing band

The front of the reinforcing band is attached to the body belt in the median line. It has a relatively non-elastic portion to furnish counter-pressure to the dependent viscera and firm support for any weakened part of the abdominal wall. This auxiliary band can be made to reinforce the support of the body band, and by changing its shape and line of attachment to body band, produce additional effects as needed for abdominal incisions, hernia, ptosis, etc.

It raises up and gives a support to the lower middle abdomen and inguinal regions which even the best fitting straight front corset fails to do, and it interferes in no way with the wearing of a corset.

It lessens the jarring of the viscera in

automobile riding, horse-back riding and athletic exercises. By lifting the superincumbent weight and removing pressure even slightly, this soft rubberless supporter brings marked relief in conditions of hemorrhoidal and varicose veins, in the nagging pains of an irritable bladder, in prolapsus uteri, and in ovarian congestion.

Ask for 36-page Illustrated Folder. Mail Orders Filled in Philadelphia Only—in 24 Hours

KATHERINE L. STORM, M. D.

Originator, Patentee, Owner and Maker

1701 Diamond St., Philadelphia

A SPECIAL COURSE BY MAIL IN IMPROVED AUTO-HEMIC THERAPY

(Autohemotherapy)

FOR

FIVE DOLLARS and FIFTY CENTS

A POST GRADUATE AUTO-HEMIC COURSE FOR PHYSICIANS AND MEDICAL STUDENTS IN AN ILLUSTRATED BOOKFORM.

The Course Teaches the Improved Technique and Laboratory Procedures of
Auto-Hemic Intravenous Medication

Published by

DR. C. B. GRAF, 320 WEST 87TH ST., NEW YORK CITY, PRICE \$5.50
Free Correspondence Course to Owners of Book

"IMPROVED AUTO-HEMIC SERUM THERAPY" with a preface by Dr. Albert Abrams, a foreword by Dr. George E. Bill of Harrisburg, Pa., with 14 original photographs of the improved technique and laboratory apparatus, instructs the student in EVERY MINUTE DETAIL of taking the blood from the patient's vein, "HEMOLYSING," "POTENTIZING" and "ATTENUATING" the blood specimen and injection into the patient. An exact, concise work, giving full details as to the method of Auto-Hemic Serum and Intravenous medication.

"The way you have perfected Auto-Hemic Therapy technic deserves all the credit and admiration of the medical profession. Auto-Hemic medication has come to stay! The great therapeutic results, which cannot be obtained any other way convinces more and more physicians every day. Anyone in doubt would be more than convinced observing your perfect technic. I believe that you improved the method to its fullest detail and the same time overshadowing the old system. It will be the future treatment of the progressive physician."—Dr. A. H. Werner, New York.

"Will you allow me to congratulate you on the clear and concise form of the text of your book Improved Auto-Hemic Serum Therapy, and the clear way you put the matter up. The case reports are next to marvellous and the theory is not only scientific but practical."—Dr. T. H. S."

Address

DR. C. B. GRAF'S New York Auto-Hemic-Intravenous Clinic
320 West 87th Street, New York City



Radiant Light and Heat For Gonorrheal Ophthalmia

The following case reported by Dr. F. S. Holladay of Los Angeles, Cal. *American Journal Electrotherapeutics*, April, 1921, p. 159:—

"This case was a woman, age 35, who had been treated by an eye specialist for Gonorrheal Ophthalmia and was becoming worse.

With the specialist's permission, I gave her one long treatment of radiant light and heat as warm as she could stand it.

She returned next day and the purulent discharge had lightened. In four days the discharge had stopped and she made a very quick recovery.

I asked the specialist to see the eye and he was very much astonished, as I was.

The condition was verified microscopically."

Thermosite

LIGHT AND HEAT APPLICATOR

is a scientifically designed and well made appliance that reflects a flood of PENETRATING light and heat in PARALLEL rays—no focal spot to burn or blister.

Far superior to ordinary hot applications because the heat penetrates deep into tissue, is constant, always ready, acts quickly and is combined with beneficial light.

Used in All Government Hospitals

Sold by electrical and surgical supply dealers

TRY THERMOLITE For the Treatment of

Neuritis	Coryza
Rheumatism	Pneumonia
Lumbago	Erysipelas
Sprains	Shingles
Stiff Neck	Eczema
Burns	Ulcers

No. 0670 OFFICE APPLICATOR

Reflector 12-in. diam. Stand adjustable from 57-in. to 96-in. high. Consumes 375 watts at 120 volts A.C. or D.C. Covers 300 square inches, 36-in. from reflector. Finish, Oil and Nickel. Price complete with stand \$30.00 each.

NO. 0645 HAND APPLICATOR

Same design as No. 0670, only 8-in. diam. Consumes 200 watts, 120 volt A.C. or D.C. Made of Aluminum, weight 16 ozs. Finish, Black and Nickel. Price complete without stand \$10.00 each.

Folding Stand only, for No. 0645, \$6.00 each.

Write for interesting and instructive literature.

H. G. McFADDIN & CO.

37 Warren Street, New York

Makers of lighting devices since 1874



Esterol in Dysmenorrhea

DYSMENORRHEA is usually relieved by a single dose of Esterol-Stearns.

Learn more of this non-nauseating, non-narcotic benzyl compound which effectively quiets excessive spasms or contractions of the unstriated muscles.

Send the coupon below for a physician's sample.

Frederick Stearns & Company
Manufacturing Pharmacists
Detroit, Michigan
Established 1855

Frederick Stearns & Company
Detroit, Michigan

Please send me Esterol-Stearns to use on a case of dysmenorrhea. Also, send the booklet, "Brief Clinical Reports," all without charge.

Name

Street

City..... State.....

BUSINESS OPPORTUNITIES

Have you something to sell or exchange?
Do you want a location or an assistant?
Are you looking for new opportunities?
Use and read this column. Ads. eight cents a word. Remittance should accompany order. Address Business Opportunity Column, The American Journal of Clinical Medicine, 4753 Ravenswood Ave., Chicago.

ASSISTANT'S WANTED—SALARIED ASSISTANTS wanted for Hospitals and Sanatoriums, also for general, mining, and contract practice; 1,000 appointments already secured for our clients. Medical practices bought and sold in all sections. For particulars write to "The Medical Echo," Lynn, Mass.

PHYSICIANS ATTENTION—BARGAIN OFFER IN Physicians' Labels and Stationery. Write for samples and prices to Consolidated Ptg. & Pub. Co., 4017 N. Robey St., Chicago.

MORPHINE NEW HOME TREATMENT FOR ALL Drug and Alcoholic Addictions. Doctor:—Treat these cases at home privately yourself. No pain, very little discomfort. Positive results. Enclose stamp for full information. Dr. Quayle Sanatorium, Madison, O., Box 7.

DRUG AND LIQUOR HABITS—SANITARIUM ESTABLISHED eighteen years. No suffering, no danger, no hyoscine, close medical care, good nursing. Pleasant surroundings, quick and absolutely satisfactory results. Ralph Sanatorium, 529 Highland Avenue, Kansas City, Mo.

SAVE ONE DOLLAR—WHEN RENEWING YOUR Subscription to CLINICAL MEDICINE specify two years at the Special Five Dollar rate thus saving One Dollar on two single year renewals at \$3.00 each.

HYPODERMICS AND AMPOULES—THE LOGICAL medium of emergency medication. The Webster label is assurance of potency and accuracy.

Write for quotations direct from laboratory to your office. Shipments made by parcel post same hour received. The William A. Webster Co., Pharmaceutical Manufacturers, Memphis, Tenn.

FOR SALE—GOATS FOR GLAND TRANSPLANTATION, or for Milk. M. M. Tuepker, Hebron, Nebraska.

FOR SALE—\$22,000 GENERAL AND SURGICAL practice with ten-bed modern hospital. Large farming territory. Good collections, schools, roads. Price \$12,000; cash \$5,000—balance credit. Address No. 1155, THE AMERICAN JOURNAL OF CLINICAL MEDICINE.

THE SEXUAL LIFE OF OUR TIME, BY DR. IWAN Bloch—a literary as well as a scientific achievement. Special price, \$6.30 on five days trial. Money back if not satisfied. Order through Counsel Service, 257 W. 71st St., New York, N. Y. Please mention CLINICAL MEDICINE.

PHYSICIANS' SUPPLIES—SURGICAL INSTRUMENTS, supporters, etc. Send for our list of leaders with prices. Please mention CLINICAL MEDICINE. Address Huston Bros. Company, 30 Randolph St., Chicago, Illinois.

RADIUM—SEND YOUR PATIENTS TO THE Radium Institute, 59 E. Madison St., Chicago. Dr. Frank Edward Simpson, director. Complete co-operation with physicians. When writing for specific information, please mention CLINICAL MEDICINE.

HABITUAL CONSTIPATION—100 TABLETS FREE. Killgore's Cascara Comp. tablets are a mild tonic laxative and give good results. Please mention CLINICAL MEDICINE, and address Charles Killgore, 55 W. 3rd St., New York, N. Y.

SPIRAL CORRECTION—DOCTORS WHO ARE using the Philo Burt method are succeeding. Each order is accepted subject to a thirty day trial. Send for free physicians' portfolio explaining our plan of co-operation. Please mention CLINICAL MEDICINE. Philo Burt Company, 13-21 Odd Fellows Temple, Jamestown, N. Y.

In Acne DERMATONE Does ZEMATOL Does in Eczema

Use Them and Prove Them

Backed by 25 years of successful clinical experience.

Catalog of pharmaceuticals mailed on request

CHICAGO PHARMACAL CO.

645 St. Clair Street, Chicago, Illinois

HEADACHE NEURALGIA NIALGEN ANALGESIC ANTISPASMODIC

R Acetanilide, 2½ grs.
Strontium Salicylate,
2 grs.
Tinctura Gelsemium,
5 M.
Strychnine Sulphate,
1/120 Gr.
Sodium Bicarbonate, qs.
Analgesic, Antispasmodic,
Fibrilugue, Antirheumatic

FOR THE RELIEF OF PAIN—

The favorite prescription with many Doctors in place of morphine, especially in the treatment of ovarian and uterine neuralgia, rheumatism, etc.

SEND FOR LITERATURE AND PRICES

The National Drug Co., Philadelphia, Pa.

12 DOZ. SUPPOSITORIES FOR \$3.00

Your Own Formula

We will make your private formula in Rectal Suppositories. One dozen boxes of one dozen each for \$3.00—boxed and plain label.

Special prices quoted on Vaginal Suppositories.

Write for particulars and special formula. Please mention CLINICAL MEDICINE.

BIERSTEDT SUPPOSITORY CO.

2919 Sheffield Ave. Chicago, Ill.

Obstetricians!! General Practitioners!! New Portable Obstetrical Table

A great invention

Write for our folder—Free
"The Last Word in Obstetrics"

NESMOHT SALES COMPANY
209-210 Arthur Building,
Omaha, Nebraska

Why Alkalol?

Because, instead of over stimulating mucous membrane cells, relaxing tissue and lowering vascular tone, ALKALOL "feeds" depleted cells with physiologically necessary salts, tones up relaxed tissues, restores vascular balance.

Hence, in irritated or inflamed conditions of the eye, nose, throat, mouth, urethra, bladder, vagina, rectum, as well as of the skin,

ALKALOL

brings prompt relief by its soothing and healing properties, and, in addition, assists natural forces to bring about a return to normal, by helping the cells to help themselves.

ALKALOL secures results unobtainable by other medicine.

Prove It

by sending for sample and "Reason Why" literature.

THE ALKALOL COMPANY

TAUNTON, MASS.

100 TABLETS FREE

ACTIVE CATHARTICS OR PURGATIVES THAT PRODUCE A WATERY STOOL DO NOT GIVE GOOD RESULTS IN

Habitual Constipation

as the digestive secretions are carried off and a period of constipation follows until the secretions again accumulate and the natural process of digestion and assimilation is resumed.

A mild tonic laxative gives the best result and you can obtain this with **Cascara Comp. Tablets (Killgore's)**, as they stimulate the secretions, give an easy natural movement without griping and do not become ineffective by continued use.

Dose: One or two tablets at night.

100 Tablets and Formula Sent to Physicians on Request

CHARLES KILLGORE

Manufacturing Chemist

Established 1874

55 WEST THIRD ST., COR. WEST BROADWAY

NEW YORK

GOITRE—DOCTOR HAVE YOU TRIED OUR Goitre Special Tablets. Sold only to physicians. 500 tablets, \$2.75. Address The Columbus Pharmacal Company, 330 Oak Street, Columbus, Ohio. Please mention CLINICAL MEDICINE.

ECZEMA—SEND FOR FREE SAMPLES OF ECZOL with literature. Address Carroll Dunham Smith Pharmacal Co., 317 E. 34th St., New York, N. Y. Please mention CLINICAL MEDICINE.

NEW PORTABLE OBSTETRICAL TABLE—A great invention. Write for free folder. Please mention this journal. Address Nesmohr Sales Company, 209-210 Arthur Building, Omaha, Nebraska.

MORPHINE—DRUG ADDICTIONS—ALCOHOLISM—Treated by the "Quayle" method. A safe and easy way. For full particulars, address Dr. Quayle Sanitarium, Madison, Ohio. Please mention CLINICAL MEDICINE.

SKIN DISEASES—SEND FOR PARTICULARS ON the Sterling Therapeutic Lamp. Illustrated booklet sent free. Address Sterling Therapeutic Lamp Co., 546 Garfield Ave., Chicago. Please mention CLINICAL MEDICINE.

THE PHYSICIAN'S CARD SYSTEM—THE "SYM-plex" reduces bookkeeping to the simplest form. Neat, practical, convenient. Price, complete, \$9.85 sent on approval. Address The American Journal of CLINICAL MEDICINE, 4739 Ravenswood Ave., Chicago.

NURSES ARE NEEDED—OUR STUDENTS RE-ceive \$25 to \$35 per week while in training on private cases. Graduates \$40 to \$45. Two year hospital, class and private case training. Write for free booklet "The Doctor and the Nurse." Address Dept. K, Illinois Post Graduate & Training School for Nurses, 456 Garfield Ave., Chicago. Please mention CLINICAL MEDICINE.

PHYSIO THERAPY—CLINICAL INSTRUCTION given by T. Howard Plank, M.D., at The American Hospital. The course covers electro-coagulation, radium, and acupunct. For particulars write M. Chase, Secretary, 1612 Heyworth Bldg., Chicago. Please mention CLINICAL MEDICINE.

DIABETES—SUGAR ELIMINATION CAN BE EF-fectively reduced with Diabettex. Send for case reports and literature. Please mention CLINICAL MEDICINE. Address Sudermann & Co., Inc., 237 Lexington Ave., New York, N. Y.

BACILLUS ACIDOPHILUS—FIRST MADE AVAIL-able to the medical profession through the Bacid preparations of the Arlington Chemical Company. Send for literature, addressing this company at Yonkers, N. Y., and mentioning CLINICAL MEDICINE.

THERMOMETERS—THE GUARANTEED BETZCO thermometers are easy to read, and guaranteed for accuracy. Special sale, \$6.50 per dozen, money back if not satisfied. Please mention CLINICAL MEDICINE when ordering. Address Frank S. Betz Company, Hammond, Ind.

BLOOD PRESSURE—PULVOIDS NATRIUM COMP. is rapidly becoming recognized as the most reliable and effective combination for reducing high blood pressure and maintaining normal tension. Send for literature mentioning this journal, and little periodical "Drug Products" gratis to physicians. Address the Drug Products Co., Inc., 153 Meadow Street, Long Island City, N. Y.

LABORATORY EXAMINATIONS—BLOOD SPUT-um, etc. Reliable, prompt. Send for prices and containers. Address National Pathological Laboratories, 5 S. Wabash Ave., Chicago, Ill.

FREE—"A SINUSOIDAL CLINIC" SEND WITH-out obligation to the Ultima Physical Appliance Co., Dept. C, 186 N. LaSalle St., Chicago, for this interesting brochure. Please mention CLINICAL MEDICINE.

FOR SALE: ONE SET OF TEST LENSES, 148 pieces and lens carrier, in oak case, made by Johnson Optical Co. Cost fifty dollars. Will sell for twenty-five dollars. Brainerd Hospital, Alma, Mich.

SMALL TOWN WANTS DOCTOR. PREFER ONE who is willing to work. Retired physician here says hustler can make \$2,500 first year. On paved road and 5 miles from nearest doctor. Investigation invited. Address H. F. Cring, Marshallville, Ohio.

The Frank Edw. Simpson Radium Institute

1604 Mallers Bldg., 59 E. Madison St.
Cor. Wabash Avenue
Telephone Randolph 5794

CHICAGO

DR. FRANK EDW. SIMPSON
Director

We desire to confer and cooperate with physicians and surgeons, assuring them adequate amounts of Radium or Radium Emanation to meet the requirements of patients referred to us.

Your inquiry or request for specific information on any point will be welcome.

THE BEST, PORTABLE ELECTRIC STERILIZER MADE FOR \$37⁵⁰



THE "AMERICAN, Jr."

Doctor, this is the sterilizer for you. It requires no fuses, plugs or replacement parts. It can't boil dry—it is automatic, safe and economical. The cover and tray are raised simultaneously—that's another advantage. The prices are very reasonable.

Size, 4x5x12	\$37.50
Size, 6x6x16	45.00

Send your order today, direct or through your dealer. Money back if not satisfied.

WRITE FOR CIRCULAR
AMERICAN STERILIZER CO., ERIE, PA.
New York Office, 200 Fifth Ave., New York, N. Y.

Here's Something Worth Trying

in cases where the auto-protective
secretions of the body are deficient

POLYGLANDULAR SOLUTION

Contains: Pituitary 5% Ovarian 40% Thyroid 10% Testicular 45%

The first pluriglandular solution marketed in this country.

Used successfully by physicians for thirteen years in

Apathy, exhaustion, hysteria, neurasthenia, melancholia, sexual neuroses, senility, menopause, amenorrhea, dysmenorrhea, anemia, vomiting of pregnancy, suboxidation, low blood pressure, salvarsan block, before surgical operations to increase resistance and prevent surgical shock, chorea, pellagra.

Furnished in 1 mil. ampoules only, for hypo., \$3.00 per dozen.

Also in POLYGLANDULAR "A," with 12% Adrenal gland added for use in hypoadrenia

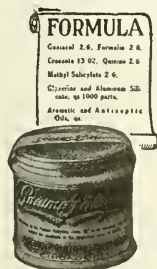
Send for literature and clinical data.

THE MARVELL PHARMACAL CO.

"EMPCO" Brand Glandular Products

31 Union Square West

New York City



Pneumo-Phthysine

A glance at the formula of PNEUMO-PHTHYSINE will at once suggest its mode of action, as also the numerous indications for its clinical application. The antibacterial properties of all the drugs contained in PNEUMO-PHTHYSINE are well established. In addition, guaiacol and quinine tend to reduce fever temperature; methyl salicylate lessens pain; quinine also promotes healing.

PNEUMO-PHTHYSINE is indicated in all localized and painful inflammatory conditions.

The fact that all the active drugs contained in PNEUMO-PHTHYSINE are readily absorbed through the skin; that they are taken up into the circulation and exert their characteristic effects, both locally and systemically, will be discussed in detail in the Fall, 1922, issue of *Endermic Medication*, which will probably appear early in September.

Ask for your copy now.

Pneumo-Phthysine Chemical Co. - - Chicago, Ill.



An Open Letter to the Medical Profession

LOOKING the facts squarely in the face, certain occurrences of the past few months make it imperative that the medical profession support, actively, the development of the chemical industry in this country, in order that we shall not again have to depend slavishly upon foreign sources of supply for important medicinals.

Doctor, you can lend great assistance to the cause of chemical independence in this country, and at the same time protect yourself and your patients, by using, specifying and referring, in all instances, to American-made drugs by their American names, such as Arsphenamine, Neo-Arsphenamine, Cinchophen, Neocinchophen, Barbitol and Procaine. These drugs are equal in quality, and identical in chemical formula, with the drugs sold under foreign names. This will mean much in encouraging the American industry, without establishing a monopoly or stifling competition.

All of the products named above are Council-passed, and their manufacture in this country is encouraged both by the American Medical Association and The Chemical Foundation.

Yours respectfully,



The Abbott Laboratories

Dept. 95, 4753 Ravenswood Ave., Chicago

31 E. 17th St.
NEW YORK

227 Central Bldg.
SEATTLE
TORONTO

559 Mission St.
SAN FRANCISCO

634 I. W. Hellman Bldg.
LOS ANGELES
BOMBAY



Rheumatism

Gout

Neuralgia

Neuritis

Sciatica

Lumbago

Migraine

The best of patients may become the worst of impatient

if kept suffering while a "painful" search is made for the "why's and wherefore's."

First relieve promptly and safely with ATOPHAN, then make it part of whatever is your favorite scheme of treatment.

Genuine ATOPHAN is manufactured at our Bloomfield, N. J. plant by a special process, precluding the possibility of even traces of irritating empyreumatic admixtures.

Complimentary Trial Package and Information from

SCHERING & GLATZ, Inc.

150 Maiden Lane,

NEW YORK

IN CONTROLLING THE NERVOUS MANIFESTATIONS OF TYPHOID FEVER

a consideration of prime importance is to protect the patient from cardiac depression.

The sedative effects of

PASADYNE
(DANIEL'S CONCENTRATED TINCTURE
OF PASSIFLORA INCARNATA)

amply control the nervous phenomena of typhoid fever, yet it does not depress the heart. These qualities make it an ideal sedative in typhoid and other severe infections.

RELIABLE—WITHOUT HABIT—SAFE

IT HAS NO CONCERN WITH THE HARRISON ACT.

SAMPLES AND LITERATURE SUPPLIED TO PHYSICIANS AVISING EXPRESS CHARGES.

LABORATORY OF JOHN B. DANIEL, INC., ATLANTA, GEORGIA.

WHENEVER THE BROMIDES ARE INDICATED
 the advantage of using an accurately
 compounded mixture of the purest
 agents will be appreciated by
 the careful practitioner.

BROMIDIA

(BATTLE)

is superior to the extemporaneously prepared mixture of
 bromides by reason of the purity of its constituents
 and the exact care with which it is prepared.

Potent in its therapeutic effects, BROMIDIA
 (BATTLE) subjects the patient to a minimum
 of untoward influences.

BATTLE & Co., Chemists' Corporation. — St. Louis, Mo.

**IODIA
 ECTHOL
 PAPINE**



TEKARKIN
 is now put up in ampoules
 as shown here

DOCTOR—
 USE
TEKARKIN
 IN
CANCER

Cancer Follows Acidosis
 OXIDATION CHECKS ACIDOSIS

TEKARKIN BRINGS ABOUT OXIDATION

Write for literature. You will be interested in what physicians have said regarding this very excellent therapeutic agent

TEKARKIN IS SOLD ONLY TO PHYSICIANS BY THE

National Bio-Chemical Laboratory
 Mount Vernon, N. Y.



Bovinine may be given in either water, milk, light wines, diluted spirits or fruit juices.

Its basis being normal blood serum, Bovinine is easily and quickly assimilated.

When a Nurse Is Not Available

When, for any reason, the patient must do without trained attendance between calls, the presence of Bovinine in the diet will assist you to overcome this serious difficulty.

BOVININE

The Food Tonic

is especially valuable in fever cases, to reinforce immunizing elements in the blood. For infants and children, Bovinine has long been regarded as the ideal non-irritating albuminous food.

Samples and Literature on Request

The Bovinine Company, 75 W. Houston St., New York City

This Doctor Succeeds Where Others Fail



Does Not Show Thru the Clothing.

He uses the Philo Burt Method of Spinal Correction in Potts Disease and all spinal troubles.

There are hundreds of doctors of all schools, throughout the U. S. and in foreign countries who now prescribe the Philo Burt Spinal Appliance in Potts Disease and all spinal curvatures and weaknesses. With them, the old-fashioned torturous unsanitary plaster cast or heavy leather and steel jackets and braces are things of the past. Here is what one doctor says after a number of years' experience in treating various forms of spinal troubles:

"The Spinal Appliance I received from you for use of one of my patients has done wonders. This lady was practically an invalid before using your appliance and is now perfectly well. She has gained about forty pounds in

weight and is able to do hard work on a farm and with perfect comfort. She is now wearing her second appliance, but tells me she believes she could get along without it now."

Each Order Is Accepted Subject to a 30 Day Trial

The Philo Burt Appliance with the treatment advised and the exercises recommended will cure all curable cases, many that are believed incurable, and alleviate and improve the condition of all others. It is always made to order from individual measurements and fits perfectly; supplies the right pressure on parts where needed and relieves the pressure that causes the trouble by taking the weight off the spine. It is light and comfortable to wear, can

be put on and taken off in a moment, the same as a vest or corset, presents no obstacle to work or exercise and does not show through the dress or clothes. It is stated that 30% of the population of the U. S. is afflicted with spinal troubles. At least 60% of these could be cured by our appliance and 90% of cures can be effected in childhood by its use. Let us send without charge our Physicians Portfolio and explain to you our plan of co-operation.

PHILO BURT CO., 13-21 Odd Fellows Temple

Jamestown, N. Y.

Standbys for the Doctor

Reorders over a period of many years indicate that the following items from our list are giving general satisfaction in terms of results.

Triple Arsenates with Nuclein

The king of tonics and reconstructants for anemia and debility cases, convalescence and for general use. In compact pills: strychnine, quinine and iron arsenates, with nuclein. Try them in a case or two by way of trial and you will use them again, frequently. 1,000 pills, \$1.76 net.

Uterine Tonic (Buckley)

For the non-surgical treatment of the pelvic disorders common in females, what else gives such gratifying results as this combination of aletroid, bryonin, caulophylloid, macrotoid, helonoid and hyoscyamine sulphate? We know of none. 1,000 granules, \$2.62 net.

Abbott's Saline Laxative

Epsom salt without its vile taste and irritating impurities. The best quick purge. Imitated but still unquestionably in the lead. $\frac{1}{2}$ doz. (5-oz.) bottles, \$5.06 net.

Sodoxylin

The surest and best weapon against acidosis, gastric acidity, heartburn. A good basic treatment, paving the way to results in many chronic cases. $\frac{1}{2}$ doz. (6-oz.) bottles, \$3.15 net.

Calcidin

The preparation to use whenever iodine is called for. Better than the tincture for internal use. Better than the iodides. Effects prompt, without gastritis or acne. 1,000 1-gr. tablets, \$2.55 net.

Intestinal Antiseptic (W-A)

A balanced mixture of sodium, calcium and zinc sulphocarbolates. Most useful against enteric infections. Saves typhoid cases. Excellent for relief of flatulence. 1,000 coated tablets, \$3.19 net; 1,000 uncoated, \$2.81 net.

Any or all of these items may be had from your druggist on prescription or from us direct. Our Vest-Pocket Guide sent free on request.

THE ABBOTT LABORATORIES

Dept. 95, 4753 Ravenswood Ave., Chicago

31 E. 17th St.
NEW YORK

889 Mission St.
SAN FRANCISCO

227 Central Bldg.
SEATTLE

634 I. W. Hellman Bldg.
LOS ANGELES

TORONTO

BOMBAY

For Prices in Canada, Apply to Our Canadian Branch, 57 Colborne St., Toronto

Laboratories Clin

You Can Depend On ENESOL

(Salicylarsinate of
Mercury)

to cause a rapid disappearance of the syphilitic manifestations.

Owing to its low toxicity (70 times less than Biniode of Hg.) it can be given in much larger doses than other mercurials.

Complete absence of pain and no local irritation make it the ideal mercury-arsenic combination for intravenous or intramuscular use.

Write for Samples, Literature and
Clinical Reports

E. FOUGERA & CO., Inc.

American Agents

90-92 Beekman St., New York

PARIS, FRANCE

Write for Booklet



—The—
**Marvel Whirling Spray
Syringe**

MARVEL COMPANY

25 West 45th Street

New York

PHENALGIN

today in the practice of
many physicians

Has Supplanted the Narcotics

as the anodyne generally
preferred and employed

For Relieving Pain

They know its use involves no danger of a drug habit, no suppression of secretions, no constipation, no digestive disturbance, no Government restriction, no filling out of blanks, no keeping of special records.

Instead, just the prompt and satisfactory relief of pain, with gratifying freedom from worry and annoyance. This is why no other analgesic fills quite the place of Phenalgin today in the successful treatment of headache, neuralgia, rheumatism, painful menstruation, lumbago, la grippe and similar ills.

Geo. C. Cook & Co., Inc.

59 Bank Street, New York

Whereas most cathartics produce a stool from sheer intestinal irritation and end by inhibiting peristalsis.

**Pil. Cascara
Comp.—Robins**

does its work by stimulating the flow of bile and other necessary secretions, by assisting peristalsis toward the normal, by restoring in the end the natural habit of the bowel.

See the difference? The proof lies in the results.

Samples for a try-out cheerfully mailed to any doctor on request.

A. H. Robins Company
Richmond, Virginia, U. S. A.

Sanborn Vital Capacity Spirometer



Latest simplified model

A reliable and accurate Spirometer of 6½ liter capacity.

Price, \$30.00
f. o. b. Boston

This instrument registers accurately the vital capacity of the lungs.

The close relationship between the clinical condition and the vital capacity in heart disease and pulmonary tuberculosis makes the Spirometer a valuable diagnostic aid. Apparatus is simple to use—no mathematical calculations required.

Ask for descriptive circular C 100

SANBORN COMPANY

1048 Commonwealth Av., Boston, 47, Mass.

We sell direct to Physicians, Hospitals, etc.

Metabolism Apparatus—Pulse Wave Records—Blood Pressure Outfits

Prescribe or Dispense

combinations of proven efficiency in order to insure satisfactory results.

MICAJAH'S Medicated Wafers

were originated by a practical country doctor for use in the treatment of irritation and inflammation of the genito-urinary tract and of the skin.

They combine in active, yet non-irritating and non-toxic, form astringent, styptic, antiphlogistic, tonic, soothing and healing properties and may be used as such in powder, solution, on tampon. A trial will convince.

Sample and Literature on Request

Micajah & Co., Warren, Pa.

Doctor

Just try GOITRE SPECIAL TABLETS on one patient and be convinced of the permanent benefits received.

Time required for treatment varies with different patients.

Goitre Special Tablets

have been thoroughly tested by the Profession and sold to Physicians only for the past six years on their merits.

Certainly your patient should have the advantage of this treatment.

1000 Tablets.....\$5.00
500 Tablets.....2.75

Manufactured by
The Columbus Pharmacal Co.
330-336 Oak Street
Columbus, Ohio

VIBURNO — BEACH

R Viburno (Beach) Original 5XJ

Sig. two teaspoonfuls 3 times daily (undiluted) before meals.

Nervine-Tonic and Anticongestive with Calmative and Corrective Action on the Bladder.

Adolescent Girls.

Ovarian Congestion and Congestive Dysmenorrhea.

Weak Pregnancy and Deficient Lactation. Menopause and its phenomena including Hallucinations, Hot Flashes, etc.

Sterility often responds after 2 or 3 bottles if no Lesion exists.

Nervous Menstrual derangement after "Flu." Irritability of Bladder (either sex).

Sample and Formula on request

The Viburno Company
116 Maiden Lane New York



The Therapeutic Power of Penetrative Light and Heat in Skin Diseases has been Proven.

In the Microbic skin diseases, such as acne, furunculosis, erysipelas, tinea sycosis and similar infections, the

STERLING THERAPEUTIC LAMP

has been found of distinct value. "Heat waves bring pure arterial blood to the part and take away the venous blood by dilating the smaller vessels in the periphery. The main action of the lamp, however, in germ or microbic diseases is, that the germs cannot live in light. The penetrating effect of the 2800 c. p. lamp is fatal to most germs in 10 minutes' time."

Illustrated booklet and literature sent on request

Sterling Therapeutic Lamp Co.

546 Garfield Ave. Desk 207 Chicago, Ill.



Pluto Water

has been successfully employed and endorsed by the Medical Profession as a uric acid solvent and eliminating agent in renal disorders; prompt, safe and efficient and well retained by the most delicate stomach.



Many practitioners direct convalescent patients to the spring for rest and complete treatment.

French Lick Springs Hotel Co.
French Lick, Ind.

"AMBUMATIC"

Trade Mark Patented

**Washable
Abdominal
Supporters
and
Adjustable
Binders**



For Men, Women, Children, Babies

Made to order only, according to the ideas of the late Dr. John B. Murphy. Adjustable for the most efficient, comfortable up-lift or binder support to any part of the abdomen.

Made for any condition, of materials as comfortable to wear as nice underwear; elastic, but no rubber elastic or leather.

No post operative hernia, and early return to business or work where the Ambumatic is used. Prescribed Once, You'll Continue to Order Them. Samples of materials, Folder, Order Measurement

Blanks, Prices, etc., on Request

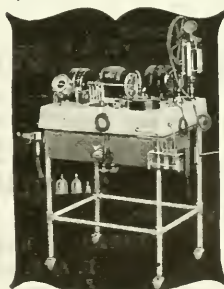
**AMBULATORY PNEUMATIC
SPLINT MFG. CO.**

30(C) E. Randolph St., Chicago.
PHONE CENTRAL 4623

FREE

**"Electro
Therapeutics
Condensed"**

NEW EDITION—It Tells You
How to get RESULTS in the treatment of many chronic conditions which do not respond readily to your present methods.
How to apply Galvanic, Faradic and Sinusoidal Currents scientifically.
How to treat Pelvic and lower abdominal diseases by Dr. Med. R. Waggoner's new method and appliances.



**SEND TODAY FOR
YOUR COPY**
It Tells You All About
The Great
Practices Builder

**The McIntosh
Universalmode**

Seven Apparatus in One
Twenty-Three Modalities
All Treatment Currents
"Earth Free"

Complete in One Unit
for A. C.

Utility, Economy,
Safety, Durability,
Price

All In Its Favor
**McINTOSH
ELECTRICAL
CORPORATION**

The "Universalmode"
Main Office and Factory
McIntosh Bldg., 223-233 N. California Ave., Chicago, Ill.

Gentlemen:—Please send me copy of "Electro-Therapeutics Condensed" and full details regarding the McIntosh Universalmode.

Name

Address
(A. J. C. M.)

CAMPHO-PHENIQUE

ANTISEPTIC DRESSING LIQUID- OINTMENT- POWDER

*Response of Certain Skin Inflammations
To Applications of*

CAMPHO-PHENIQUE

*Points clearly to the market value of this agent in dermatoses.
CAMPHO-PHENIQUE has decided germacidal properties and is also
an antipruritic of more than usual power.*

*In chronic eczemas, attended by irritations, CAMPHO-PHENIQUE
applied several times daily will give gratifying relief and help in
restoring the skin to a normal state.*

Samples and Literature on request.

CAMPHO-PHENIQUE LIQUID, small size 30c, large size \$1.20

CAMPHO-PHENIQUE POWDER, small size 30c, large size 75c

Campho-Phenique Co.,

St. Louis, Mo., U. S. A.

"A Prompt Diagnosis is Half the Battle of Disease"—OSLER

Two New Time Saving Glucose Tests

FOR INSTANT USE IN OFFICE OR SICK ROOM

1. QUALITATIVE

Time, 45 Seconds

Cost, 1¼ Cents.

Directions: Roll up an F. A. F. Sugartest Strip, drop into test tube or any porcelain or enamel dish; add a little water, add 3 to 5 drops of urine: Boil. If liquid turns yellow, sugar is present.

Ten Times as Sensitive as Fehling's
F. A. F. SUGARTEST STRIPS

15 Qualitative Tests in a Vest Pocket Packet for 25 Cents.

2. QUANTITATIVE

Time, 3 Minutes.

Cost 15 Cents.

RAPID RELIABLE ACCURATE
F. A. F. SUGARTEST TUBES

Box of 10 Complete Quantitative Tests \$1.50.

FRANCO-AMERICAN FERMENT CO.
225-7 SIXTH AVENUE, NEW YORK CITY

Biological Products of Quality

The Gilliland Laboratories, Inc.
AMBLER, PA.



ERGOAPIOL (Smith)

For
AMENORRHEA
DYSMENORRHEA
MENORRHAGIA
METRORRHAGIA
ETC.

ERGOAPIOL (Smith) is supplied only in packages containing twenty capsules.

DOSE: One to two capsules three or four times a day. * * *

SAMPLES and LITERATURE SENT ON REQUEST.

MARTIN H. SMITH COMPANY, New York, N.Y., U.S.A.

SUPPORTIVE TREATMENT IN SYPHILIS

In the management of syphilis an essential point is to increase the body's powers of resistance — a quality that renders the tissues inhos-

pitable to the spirochaete. This added resistance intensifies the action of specific treatment, thus giving the patient the best protection against later manifestations.



will be found of high utility for the purpose in hand. Under its use the blood stream becomes richer in essential elements and the tissues more resistant to infectious processes.

SUPPORT YOUR SYPHILITICS.

EASILY ASSIMILATED — FREE FROM GREASE AND THE TASTE OF FISH

EACH FLUID OUNCE OF HAGEE'S CODIAL OF THE EXTRACT OF COD LIVER OIL COMPOUND CONTAINS THE EXTRACT OBTAINABLE FROM ONE THIRD FLUID OUNCE OF COD LIVER OIL, (THE FATTY PORTION BEING ELIMINATED), FOUR GRAINS CALCIUM GLUCEROPHOSPHATE, FOUR GRAINS SODIUM GLYCEROPHOSPHATE, ONE HALF GRAIN SALICYLIC ACID, (MADE FROM OIL WINTERGREEN), WITH GUMMERS AND AROMATICS.

Beware! Not in sixteen ounce bottles only. Dispensed by all druggists

Kathron Chemical Co., St. Louis, Mo.

LACTIGEN

LACTIC



ANTIGEN

New and Important from our Biologic Laboratories

A Safe, Efficient and Convenient Product for Non-Specific
Therapy

Lactigen—a milk protein solution for intramuscular injections. Prepared from the milk of tuberculin-tested cows, sterilized while still fresh. Supplied in 5-Cc. ampules.

Lactigen answers the most exacting requirements of protein therapy as successfully practiced in Europe by Bruch, Muller, Forster and many other physicians of note, and now attracting wide interest in medical centers abroad. Good, even remarkable, clinical success is reported in the treatment of—

Arthritis, neuritis, Hemorrhagic diathesis, purpura, Epididymitis, bubo, Soft chancres, ulcers, Furunculosis, acne, herpes, Chronic abscesses, etc.

Stimulates leucocytosis. Mobilizes the defensive forces (antibodies) of the body. **Lactigen** increases the red blood count when deficient. Doctor, try **Lactigen** in your next case of anemia or arthritis and report results.

Net Price: per box of 6 ampules, \$1.20

See that your druggist is stocked with Chlorazene for your prescribing convenience.

THE ABBOTT LABORATORIES

4739 RAVENSWOOD AVENUE, CHICAGO

31 E. 17th St. New York	227 Central Bldg. Seattle	559 Mission St. San Francisco	634 I. W. Hellman Bldg. Los Angeles
	Toronto	Bombay	

For Prices in Canada, Apply to Our Canadian Branch, 57 Colborne St., Toronto



Doctors Agree

Thousands of physicians who recommend Sani-Tissue, to patients, agree that it is a boon to sufferers from rectal or anal disorders.

The soft, cloth-like, soothing quality of this medicated toilet paper is a great comfort to anyone thus afflicted.

Sani-Tissue is a frictionless, absolutely non-irritating paper, made under the most sanitary conditions. Doctors can safely recommend it. Send for Free Sample.

Scott Paper Co., Chester, Pa.

New York — Philadelphia — Chicago
San Francisco

Sani-Tissue

"Clothlike when crushed in the hand."

Not to use

a product that is effective in many diseases, might be called unfair to the patient.

Not to know

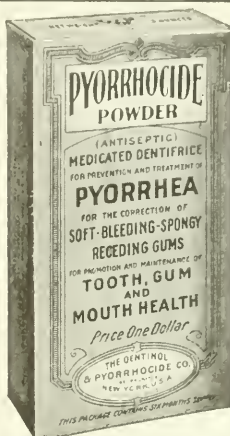
of its curative value is equally indefensible in the light of over 20 years of thorough clinical research and highest professional approval.

Burnham's Soluble Iodine

does not irritate the stomach and kidneys, though given in large doses and over continuous periods.

In auto-toxemia of whatever origin, and all septic processes its use means service of the most definite character.

Burnham Soluble Iodine Co.
Auburndale, Mass.



FREE A copy of "Causes and Effects of Pyorrhea—Its Treatment and Prevention by the Dentinol and Pyorrhocide Method" mailed on request.

THE DENTINOL & PYORRHOCIDE CO., INC.

Sole Distributors

1480 Broadway

NEW YORK

ESSENTIAL

To Every Physician and Hospital

JOHN URI LLOYD'S

HISTORY OF PHARMACOPOEIAL VEGETABLE DRUGS

Its 449 buckram-bound pages, illustrated with 28 halftones, trace the history of every botanical remedy ever presented in any edition of the U. S. P. from antiquity to today.

Geographic distribution—various popular designations—rise and fall in medical favor—the progressive steps of the research workers—every important fact in the history of every U. S. P. botanical remedy is there.

The \$6.00 price pays less than cost. The small edition will soon be exhausted. Use the attached order blank TODAY.

Mail \$6.00 With This Coupon TODAY

AMERICAN DRUG MFRS. ASSOCIATION.

507 Albee Building, Washington, D. C.
Enclosed is \$6.00 for a copy of Lloyd's Pharmacopoeial History.

Name
Address

**"He giveth straw to his
dog and bones to his ass."**

English Proverb

At the bottom of almost every morbid condition lies chronic inflammation, the electro-pathology of which is just beginning to be understood.

To attempt to treat local inflammation superficially is to fail to reach or remedy the trouble. But DIONOL, acting in accord with scientific laws, reaches and removes the underlying causes and thus brings about a prompt return to normal.

Try it in ulcer, wound, burn, hemorrhoids, boil, abscess, mastitis, etc., and be convinced.

The skeptic who tries DIONOL soon comes to realize its efficiency and depend upon its action and effects.

Sample, literature, case reports, on request.

The DIONOL Co. Detroit, Mich.

Amenorrhoea Dysmenorrhoea

and other disturbances of the menstrual function call for the true active principle of Parsley:

APIOLINE
(Chapoteaut)

It Secures Results

by acting directly upon the uterine nerve endings and producing ovarian hyperemia, but without disturbing gastric or renal functions.

Avoid impure and unreliable substitutes.

Prescribe original vials of 24 capsules.

Laboratory of

DR. PH. CHAPELLE,
NEW YORK-PARIS

Physicians' sample and literature on request to
E. Fougere & Co., Inc., American Agents
90 Beekman Street, New York
Canada: Lyman's Limited, Montreal

This Is the Magazine!

Laurinburg, N. C., February 9, 1922.

Dear Dr. Hornsby:

This is the magazine! I have been reading this book for two months, and it has been a great help to me in solving the problems of my own work. I appreciate it very much. I am sending one dollar for subscription.

Yours truly,

A. E. MURPHY.

HORNSBY'S Hospital Magazine

John A. Hornsby, M. D., Editor

Author "The Modern Hospital"

(Late Chief Hospital Construction Division,
U. S. A., Washington)

Each Issue Contains a Message for Every
Hospital Worker in the Great Southwest

The Problems of Today Are Discussed in the
Hornsby Way

One Dollar the Year

Hornsby's Hospital Magazine

542-53 Monadnock Block Chicago, Ill.

Non-Surgical Drainage of Biliary Tract
Mayhew and Smith

Carcinoma of the Breast Ford

Local Anesthesia in Gall Bladder Surgery
Potter

The Doctor in the Movies Bogart

Ultra Violet Treatment Pacini

ALL OF THE ABOVE APPEAR IN

THE MEDICAL HERALD and ELECTRO-THERAPIST



\$5.00 for \$3.00

The Medical Review of
Reviews (New York), per
year, \$2.00 (including the
Monthly Index-Medicus).

The Medical Herald and
Electro-Therapist, \$2.00.

Copy of this artistic pose
in size to frame, \$1.00.

Total, \$5.00. All for \$3.00.

Write plainly. Ask for
"Good Things to Come."
THE MEDICAL HERALD
& ELECTROTHERAPIST,
113 East 31st St., Kansas
City, Mo.

Add 25c for Canada, 50c
for foreign postage.

New Book: "High Frequency Practice"

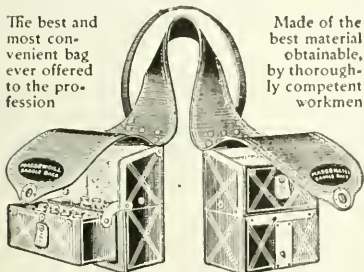
By Dr. B. B. Grover. Just out. 400 Pages;
100 illustrations. "Tells you how."

Price, \$4.00.

Send \$5.00 and receive this book and the
Herald for a year.

Massengill's SADDLE-BAGS

The best and most convenient bag ever offered to the profession



Made of the best material obtainable, by thoroughly competent workmen

WRITE FOR DETAILS

We are Large Manufacturers of Medicinal Products

PROPRIETORS OF
CREO-DERMA

FOR

Obstinate Skin Diseases and Intense Itchings
(FREE SAMPLE TO PHYSICIANS)

The S.E. Massengill Company
Bristol, Tennessee



Sold on Suspicion

Our proposition makes payment conditional on satisfactory results in skin troubles, burns, and hemorrhoids.

ECZOL

Reg. U. S. Pat. Office

really does so such wonderful work that it is sold on suspicion as a matter of good business policy.

Literature and samples mailed to interested physicians on request.

Carroll Dunham Smith
Pharmaceutical Co.

317 East 34th Street
NEW YORK

Established 1844

Carpenter's X-Ray Laboratory

Established 1904

SPECIAL COURSES

TECHNICIANS

Complete instruction, including the taking and developing of Radiograms of all parts of the body, use of the Bucky Diaphragm, Stereoscopic and Fluoroscopic examinations.

PROFESSIONAL

Post-graduate instruction in interpretation and X-Ray treatment.
EQUIPMENT

Complete in every detail. Not a sales agency.

J. H. CARPENTER, M. D.
(Formerly Radiologist, Cook County Hospital)

1904-6 Ogden Ave. Chicago, Ill.



FISCHER'S X-RAY UNIT

A COMPACT, efficient, fine-appearing X-ray unit, capable of the finest kind of X-ray work of all parts of the body.

The "Type R"—Note the unique tube arm with its great range of adjustability and easy manipulation.

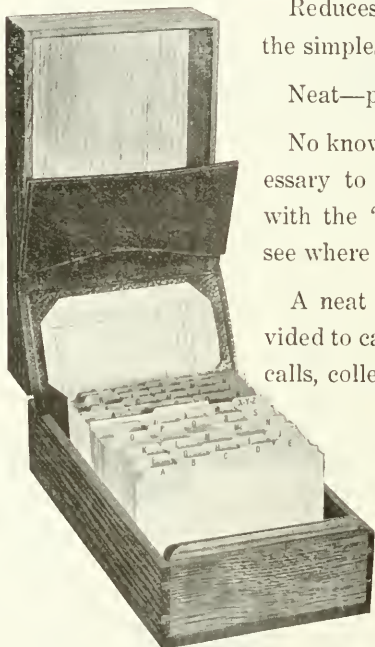
The new price is particularly attractive, and represents the finest value.

H. G. FISCHER & CO.,
2337 Wabansia Ave., Chicago

Gentlemen:—

Please send full particulars and price of your NEW "Type R."

“Symplex” Physicians’ Card System



Reduces professional accounting to the simplest form.

Neat—practical—convenient.

No knowledge of bookkeeping is necessary to keep your accounts posted with the “Symplex” System—you can see where you stand at a glance.

A neat leather pocket folder is provided to carry cards, on which to record calls, collections, etc.

The “closed” accounts are kept separately in back of box. Two sets of guides are provided and 500 ruled cards. The cabinet is hardwood with hinged top.

Price Complete \$9.85

- 1 Hardwood Cabinet, Hinged Top.
- 500 3x5 Ruled Ledger Cards.
- 2 Sets Alphabetical Guides.
- 1 Transfer Guide.
- 1 Pocketbook for 3x5 Cards.

Prices quoted on extra cards.

Only \$9.85 complete, cash with order, delivery charges prepaid.
Money back if not satisfied.

The American Journal of Clinical Medicine

4739 RAVENSWOOD AVE.

CHICAGO, ILL.



To ALLEVIATE PAIN, to PROMOTE DIURESIS and to PROTECT the membrane of the urethra, especially THE POSTERIOR PORTION—these are the important objects of the treatment of acute cases of Gonorrhea.

The entire urinary tract should be influenced by means of proper internal medication. Local injections alone will not be sufficient. This is the rationale of GONOSAN.

RIEDEL & CO., Inc.

104-114 S. Fourth Street

BROOKLYN, N. Y.

**Nurses Supplied
for All Kinds
of Cases**

Our Students Receive \$25.00 to \$35.00 per week While in Training on Private Cases. Graduates \$40.00 to \$45.00.

TWO YEAR HOSPITAL, CLASS AND PRIVATE CASE TRAINING.

Write Dept. K for Free Booklet—"The
Doctor and the Nurse."

ILLINOIS POST GRADUATE AND TRAINING SCHOOL FOR NURSES

545 Garfield Avenue, Chicago, Illinois

**NURSES
ARE NEEDED**

**Telegraph or
Telephone
LINCOLN 2155**

CLINICAL INSTRUCTION IN PHYSIOTHERAPY

Is given by T. Howard Plank, M.D., at the American Hospital

The course covers electro-coagulation, radium, and actinic rays.
For particulars write

M. CHASE, SEC'Y, 1612 HEYWORTH BLDG., CHICAGO, ILL.

**POND'S
Extract**

Foot Soreness

For tender, sensitive feet there is nothing that will prove more serviceable and beneficial than a liberal application of Pond's Extract several times daily. Its soothing, cooling action and mild astringency rapidly relieve congestion and soreness and restore the skin of the feet to a normal resistant condition.

POND'S EXTRACT CO., NEW YORK AND LONDON



Calcreose

In Bronchitis and Tuberculosis

Calcreose is particularly suitable
as an adjunct to other remedial measures.

Calcreose contains in loose chemical combination
approximately equal parts of creosote and lime.

Calcreose has all the pharmacological activity of creosote but does not cause any untoward effect on the gastro-intestinal tract, therefore Calcreose may be taken in comparatively large doses for long periods of time.

Sample on request.

THE MALTBIE CHEMICAL CO.,

NEWARK, N. J.

Cinchophen, Abbott

The genuine drug properly labeled and called by its correct and ethical American name. A high-grade, council-passed drug made by American chemists, the equal of the best ever imported. Physicians are urged to specify it when prescribing, to insist on it always when ordering. Druggists in most towns and cities have it or can readily obtain it through the regular trade channels.

Cinchophen is believed to be safer than the salicylates, especially when it is necessary to favor the kidneys. It is suggested as a prudent change from the common coaltar derivatives, including aspirin. It is recommended for relief of pain in—

Headaches
Arthritis
Gout

Neuritis
Lumbago
Sciatica

Acute Rheumatism

Prices Reduced. This excellent drug deserves the widest usage against the above named conditions. We are therefore glad to announce the following substantial reductions from the old prices:

For the tablets—100, \$2.25; for the powder—4 ounces, \$5.15.

See that your druggist is stocked, or order from us direct.

Circular (C283) sent on request.

THE ABBOTT LABORATORIES

Dept. 95, 4739 Ravenswood Avenue, CHICAGO

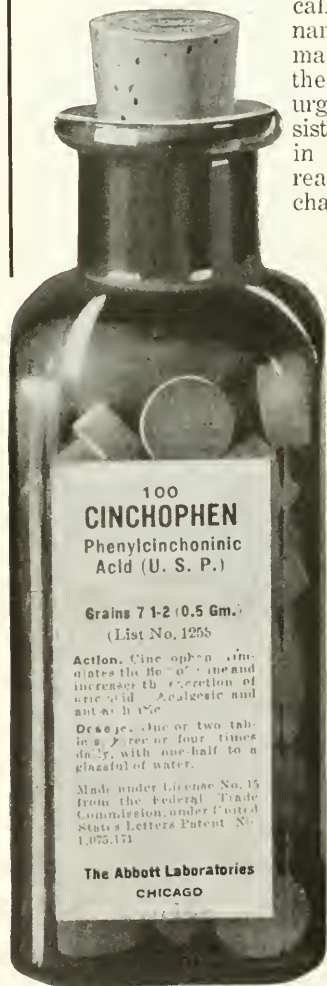
31 E. 17th St., New York 559 Mission St., San Francisco

227 Central Bldg., Seattle 634 I. W. Hellman Bldg., Los Angeles

TORONTO

BOMBAY

For Prices in Canada Apply to Our Canadian Branch,
57 Colborne St., Toronto



LISTERS DIABETIC FLOUR

DIABETES

Strictly Starch-free. Produces Bread, Muffins. Pastry that makes the distressing features of

Grow Less and Less =

Li ters prepared casein Diabetic Flour—self rising. A month's supply of 30 boxes \$4.85
LISTER BROS. Inc., 405 Lexington Avenue, New York City

TAUROCOL TABLETS

(TOROCOL)

Torocol is a combination of bile salts, extract of cascara sagrada, phenolphthalein and aromatics.

TAUROCOL COMPOUND TABLETS

With Digestive Ferments and Nux Vomica

Manufactured exclusively for physicians, prescriptions and dispensing. Complete formula, samples and literature on request.

THE PAUL PLESSNER COMPANY, DETROIT, MICH.

FOR FIFTY YEARS

eminent physicians all over the country have prescribed and endorsed our well-known and reliable disinfectant. The constant use of it in the home will prevent the spread of any disease-germ that lurks in the darkest corner.

Use it now.

Don't wait until Sickness comes. Protect your health with

SAFETY FIRST

Platt's Chlorides

Theodor's Disinfectant
 (Trade-Mark Registered)

Write for sample to

HENRY B. PLATT CO.

48 Cliff Street

NEW YORK CITY

WALLACE-SOMERVILLE SANITARIUM

Succeeding the Pettey & Wallace Sanitarium

MEMPHIS, TENN.

WALTER R. WALLACE, M.D.
 WILLIAM G. SOMERVILLE, M.D.

FOR THE TREATMENT OF

**DRUG ADDICTIONS, ALCOHOLISM
 MENTAL AND NERVOUS DISEASES**

Located in the Eastern suburbs of the city.
 Sixteen acres of beautiful grounds.
 All equipment for care of patients admitted.



CHLORAZENE



Dakin's simplified chlorine-carrying antiseptic

The best practical antiseptic for general use. Leaves all others far behind.

Combines a very high degree of working efficiency with a very low, almost negligible, toxicity. Much more powerful than carbolic acid. Quicker to act and more thorough than mercury bichloride. Yet safe to entrust to patients, for home use between office visits; without the worry and the risk attached to other relatively strong, but poisonous, antiseptics.

Chlorazene is soluble in water. Solutions are easily prepared when and as wanted, especially with our tablets. It is economical, too, because weak dilutions suffice.

Net Prices:

Tablets, each 4.6 grs., 1000.....	\$3.75
Powder, 1 pound.....	\$4.13

A sample tube of the tablets free on request.

This excellent antiseptic is also available in the form of Chlorazene Surgical Cream, Chlorazene Soap Powder, Chlorazene Gauze, Chlorazene Dusting Powder and Aromatic Chlorazene Powder.

See that your druggist is stocked for your prescription needs. Or order direct from us.

THE ABBOTT LABORATORIES

DEPT. 95, 4739 RAVENSWOOD AVENUE, CHICAGO

31 E. 17th St. New York	227 Central Bldg. Seattle	559 Mission St. San Francisco	634 I. W. Hellman Bldg. Los Angeles
	Toronto	Bombay	

For Prices in Canada, Apply to Our Canadian Branch, 57 Colborne St., Toronto



Better Than the Best Buggy

In many ways, for many requirements,
and at less than half the cost of a
first-class buggy—the genuine

HAMMOCK CART

Thousands in use by doctors, farmers,
mail carriers and others, who testify to every claim made for it.
Easy riding—no horse motion. Light draft, no weight on
horse's back. Built for durability, service and first-class ap-
pearance. Outwears several buggies. Goes where a buggy can-
not. Pole or shafts. Top or open. Write for Book "C,"
Testimony and Particulars.

THE EUREKA CO., Sole Makers, Rock Falls, Ill.

EARN EXTRA MONEY

In Your Spare Time

To doctors, nurses and med-
ical students we have a very
liberal money-making propo-
sition.

Twenty new subscriptions to
Clinical Medicine will net you
\$50.00.

For particulars, address:

S. DE WITT CLOUGH, Bus. Mgr.

4753 Ravenswood Avenue
CHICAGO, ILL.

Hay Fever and Asthma

Successfully treated with
RESPIRAZONE-TILDEN'S

Allays hypersecretion, subdues inflam-
mation, relaxes muscular tension and
possesses the necessary alternative power
to produce proper resolution of the in-
flammatory exudates.

Write for Free Sample

THE TILDEN COMPANY,
Manufacturing Pharmacists and Chemists Since 1848
New Lebanon, N. Y. St. Louis, Mo.

MORPHINE

Drug Addictions

Alcoholism

Treated by the "Quayle Method."

A safe and easy way. Results guaranteed.
Treatment is painless and supportive, rather than
depressant. No nervous period experienced. I
also furnish a *Home Treatment* for Physicians to
use in treating addicts at home, who for various
reasons are unable to go to a Sanitarium.

For full particulars address

DR. QUAYLE SANITARIUM

Chas H. Quayle, M.D., Medical Director
Dept. 501 Madison, Ohio

THE PROFESSION
HAS ENDORSED

"Horlick's"

The Original
Malted Milk

For over one-third century, because of
the favorable results obtained.

AVOID IMITATIONS

Sal Hepatica

The
Standard Saline
Laxative

Samples on request

Bristol-Myers
Co.
NEW YORK



THE ENDO LINE

 *The Rationale
of
Intravenous
Iron Therapy*

Thirty-five grains is the total iron content of the blood in the average man. A few grains, therefore, make a large difference in the state of health.

Large quantities of iron are given by mouth. These are largely precipitated in the intestines and cast off as unabsorbed iron sulphide in the fecal discharges.

One grain of Ferric Dimethylarsenate (Endoferarsan) exhibited intravenously, produces an average increase of 125,000 red corpuscles, with a corresponding rise in haemoglobin index. This is soon followed by improved oxidation, oxygenation, metabolism and nutrition.

Endoferarsan is used in anemia, chlorosis, debility and convalescence. Ten or twelve doses are usually given at 3 or 4-day intervals.

May be had in boxes of 6 ampoules from druggists, physicians' supply houses or from us.

Let us send you interesting reprints and booklet.

Intravenous Products Co. of America, Inc.
121 Madison Ave. New York City

ENDO
Intravenous
Solutions

Colloidal
Silver Salts
and
Mercury
Preparations

SYPHILIS AND GONORRHEA

**SEND FOR THIS FREE BOOKLET
ON TREATMENT AND PROPHYLAXIS**

Doctor Here are three essentials for the Prophylaxis and treatment of Syphilis. Take advantage of the Special Introductory Offer to try these splendid remedies.

1. Injection-Heyden

Gives excellent results in the treatment of syphilis without the usual discomfort to the patient experienced upon the injection of other mercury salts, especially valuable where the arsenic and mercury treatment are combined, given intramuscularly in doses of 1 to 2 c.c. every 2 to 4 days. Supplied in boxes of 12 ampoules, each containing about 1 1/4 c. c.

2. Calomelol Ointment

For the inunction treatment of syphilis. Contains the equivalent of 30% metallic mercury, 23% being in the soluble and 2% in the insoluble form of calomelol. It is clean and almost colorless and does not soil the clothing as is the case with Blue Ointment. Supplied in graduated

tubes containing 2 ozs.: each interval between the graduation marks represents 45 grains.

3. C. I. T. (Calomelol Immediate Treatment)

An effective prophylactic against both the spirochetæ and gonococcus immediately after contact. Supplied in prophylactic tubes.

\$4.00 WORTH FOR \$2.00

In order to prove the remarkable results obtained and the convenience and advantages of administration of the above preparations, we will send to you, once only, on receipt of the enclosed coupon and two dollars, which is half the regular price.

Special Introductory Offer

1 Box Injection-Heyden, regular price.....	\$1.50
1-2-oz. Tube Calomelol Ointment, price.....	1.00
1/2 doz. C-I-T Calomelol, immediate treatment, price.....	1.50

\$4.00

along with our booklet entitled "Colloidal Silver Salts and Mercury Preparations," which gives complete information on these preparations.



**HEYDEN
FINE
CHEMICALS**



HEYDEN CHEMICAL CO. OF AMERICA INC
134 William St. New York

Tested Organotherapeutic Formulas in a New and Better Package

HARROWER "SANITABLETS"



The Harrower Pluriglandular Formulas are now supplied as friable tablets. Each dose is individually wrapped in paraffined paper—air-tight and moisture-proof. "SANITABLETS" have the same formulas, list numbers and prices as the corresponding Harrower capsules. This new form prevents fraudulent substitution, as the Harrower "SANITABLETS" cannot be counterfeited.

Prescribes:
S. T. ADRENO-SPERMIN CO.
(Harrower)

for asthenia, low blood-pressure, suboxidation, subnormal temperature, and other conditions requiring "adrenal support."

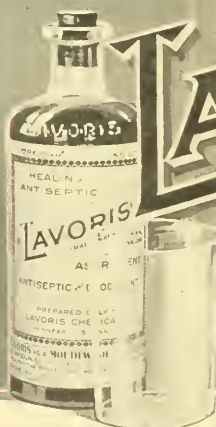
(The initials "S. T." stand for "Sanitables")

THE HARROWER LABORATORY

HOME OFFICE: BOX 68, GLENDALE, CALIF.
NEW YORK, 31 Park Place
CHICAGO, 186 N. La Salle St.
DENVER, 621 Central Savings Bank Bldg.

BALTIMORE, 4 E. Redwood St.
KANSAS CITY, MO., 711 K. C. Life Bldg.
PORTLAND, ORE., 607 Pittcock Block
DALLAS, 1805½ Commerce Street

The original
Zinc Chloride
Antiseptic



LAVORIS

Means
**CLEAN AND HEALTHY
MOUTHS**

LAVORIS CHEMICAL CO.
MINNEAPOLIS, MINN. U.S.A.